THE LANCET.

LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND DISEASES

OF THE EYE,

By MR. LAWRENCE.

London Ophthalmic Infirmary, Moorfields.

Lecture XXIII.

Malignant Affections of the Eye.

Gentlemen,

I have described to you the different inflammatory affections of the eye, and the consequent changes of structure which they produce; many of these changes are injurious to the organ, as far as vision is concerned, but not dangerous to life.

The eye is subject to other diseases, which not only impair or destroy its function, but are of so malignant and intractable a character as to be dangerous to life itself. We see it affected with cancer, and with that peculiar change, in which its component tissues are converted into a soft medullary texture; and these affections I shall now proceed to speak of. In the cases of soft cancer, or the medullary structure affecting the eye, and in those of cancer, there is always ultimately more or less change in the figure of the globe, and particularly a production of fungus. These affections, but more particularly the former, are attended with the formation of a new growth, which after a time displays itself externally in the form of a spongy, bleeding structure, and is therefore sometimes called the fungous, or fungoid affection of the eye. It is unnecessary, perhaps, to say that there are affections of the eye attended with the formation of fungus which are not of a malignant character, which may prove destructive to the eye as the instrument of vision, but do not endanger life. I shall first mention some of these.

Fungous excrescences of an innocent kind arise from severe inflammation of the anterior parts of the eye. After severe external inflammation, with considerable redness, and violent pain in the organ, a fleshy vascular substance may spring up from the surface of the sclerotic coat, or from the cornea; or such a production may proceed from the iris, and cause ulceration of the cornea. Such a vascular or fungous growth may assume a very formidable appearance for a certain time, and then gradually subside, the eye going into a state of atrophy; or you may have, after the existence of severe inflammation, a bluish kind of prominence arising from the corpus ciliare, behind the margin of the cornea, proceeding from within, outwards, so as to induce you to suppose, at first sight, that it was a fungus arising from the bottom of the eye. This swelling turns more or less yellow, bursts, and discharges matter; after which the eye shrinks and becomes atrophic, without any further injury to the patient. Several cases of that kind are recorded; there are two in the posthumous work of Mr. Saunders.

A child came to this Infirmary with severe external inflammation of one eye; there was so much swelling, that we could not separate the palpebræ sufficiently to obtain a view of the eye: the child had a hot skin, a quick pulse, and a furred tongue; there was great pain in the head, restlessness, and want of sleep, altogether evincing that the inflammation was severe and the constitutional disturbance considerable. Leeches were applied to the eye and suitable internal means used; in the course of three or four days, the inflammation was so reduced that I succeeded in getting a view of the front of the eye, when I found that there was great external redness and a dull state of the cornea; that the iris was pushed forwards, and that the pupil was partially opaque. It was obvious in this case, that the only plan of treatment to be pursued was to continue the use of the anti-

phlogistic means; this plan was followed, but the child continued to suffer very much, and a tumour gradually arose behind the edge of the cornea, and acquired the size of a horse-bean; it became in some parts of a yellowish colour. Now this yellowish appearance of the tumour gave one the idea that it might be a sort of fungus issuing from the bottom of the eye, that it might be a case of fungus hæmatodes. Afterwards two or three smaller projections took place from the sclerotic, in a regular series with the former. The inflammation attending the progress of the affection was severe, and leeches were so frequently applied, purgatives so often given, and blisters and other antiphlogistic measures so long continued, that the child became very feeble and debilitated; yet there was always "some inward fever," as the mother said. The means employed did not seem to counteract this fever, and a great many weeks had elapsed, when the eye got rather better; the child had less pain; the protuberances, which had formed round the cornea, diminished in size, and slowly but gradually shrunk; the external redness was reduced, and after a time the globe went into a complete state of atrophy, being reduced to a very small size, and the child recovered without any further injurious consequences.

I saw a young boy some years ago, who had apparently a simple, fleshy, vascular growth proceeding from the iris; it had caused ulceration of the cornea, and thus protruded externally. I saw the case two or three times, but, as the patient lived in the country, did not witness its termination; I was informed, however, that the tumour after a time subsided, and that the eye shrunk in the socket.

Scarpa mentions two or three instances of a similar kind, in his work on the diseases of the eye; and indeed there are many others in which, after severe inflammation, vascular and fleshy growths appear to have sprung up from the cornea and sclerotic coat. Scarpa says, that the protrusions thus formed occasioned so much mischief and irritation that he was induced to remove the anterior portion of the eye, the anterior segment of the globe, and that the cases did very well. It may be doubted whether this was absolutely necessary, and whether if they had been treated by antiphlogistic measures only the cases would not have terminated equally well.

In Mr. Travers' work is a description of a case, illustrated by engravings, in which a tumour formed upon the external surface of the cornea; it was lobulated, and of a dark purple colour, so as to resemble small black currants, and it extended so as to cover the entire cornea, and consequently destroy sight. Mr. Travers removed it by a single section, carried across the front of the eye behind the morbid growth, which was thus found not to have extended deeper than the cornea.

Another case is mentioned in the work of Mr. Travers, in which a vascular fungus shot out from the iris, which was removed by Sir Astley Cooper; it was a large tumour of the size of half a walnut.

In all the cases I have mentioned to you, the only effect of these growths has been the disorganization of the eye and the destruction of vision; the disease has then entirely ceased. The mode in which the disease has arisen, the severe external inflammation which preceded the organization of the fungus, will be sufficient to distinguish these cases of *innocent fungi* from those of a more malignant character, which I shall now describe to you. If a person looks to the general appearance of the patient, and will examine minutely the symptoms under which the disease presented itself, he will be able to distinguish between cases of this kind and the more malignant affections which may require operation, and which, even after being operated on, proceed in too many instances to destroy life.

Cancer Oculi.

The globe of the eye, and its surrounding appendages, are liable to cancerous affections; to that kind of altered structure, which in its origin, progress, and symptoms is similar to the disease occurring so frequently in the female breast, and which may take place in most other parts. The globe is converted into a scirrhous substance; it loses all appearance of its natural structures, and is converted into a firm, greyish, brownish, or yellowish substance, having a knotted or tuberculated surface, with varicose veins running over it; this change in structure is followed by an ulcerative process of a very destructive kind, attended with a sanious or ichorous discharge, with great pain and great constitutional disturbance.—Cancer of the eye is fortunately not a common affection. It has often happened that during twelve months, among the great number of patients who come here, not a single case of cancer has presented itself. This affection of the eye begins, in some cases, in the palpebræ and conjunctiva; an unhealthy kind of tubercle forms in the lid and goes into ulceration, gradually spreading into the adjoining

texture; it creeps on slowly from the lid to the conjunctiva, and when it reaches the conjunctiva, there is generally considerable inflammation produced; from this it spreads ultimately to the globe itself. It is said that scirrhus often commences in the lachrymal gland, and spreads from there to the globe of the eye; but I should rather doubt that representation; the lachrymal gland is similar in its texture to the salivary glands, and to the pancreas, and we know that these parts are very rarely diseased in any way. In some cases the globe is converted into a scirrhous mass, without the surrounding parts being involved. Mr. Travers says, the disease always begins in the palpebræ, or conjunctiva lining it; but that is not in accordance with what I have observed. I have seen cases in which the palpebræ remained quite sound, when the disease was spreading through the globe. We want materials, however, to illustrate the early history of these cases, as we often do not see them until they are fully developed; and when they are so, it is difficult to speak of the parts first attacked with any certainty. The after history of such cases is very obvious; the structure of the globe is destroyed, and converted into a semi-cartilaginous substance; after a time ulceration takes place, attended by the discharge of a sanious or bloody ichor, with great pain and constitutional disturbance, so that at last the patient is worn out by the continual excessive irritation. This cancerous affection of the eye resembles the progress of cancer in other parts of the body, in its incurable nature; it is altogether an intractable disease, and does not admit of cure by any external or internal means. It is a malignant disease, attended with the destruction of the part in which it is originally seated, and if not removed will prove destructive to life.

The only question is, whether we are justified in removing the affected part in the early stages of the disease, and whether it is advisable to propose and to perform the operation? The only circumstances under which it would be at all advisable to do this, would be where the affection is confined to the globe of the eye, and where the globe is still free and moveable in its orbit; for if the complaint has proceeded to the surrounding parts, and have produced adhesions so as to fix the mass to these parts, the operation would be hopeless. When the globe is not much increased in size, although altered in texture; when it is still moveable; if you can trace no appearance of disease in the palpebræ, and if the general health of the patient be unaffected, I would propose to such a patient the removal of the affected eye, at the same time intimating that I could not positively answer for the operation proving a perfect remedy; however I think it would be fair to hazard an operation under such circumstances. Beer mentions that he lost two cases out of seven; but I should say, that if he saved five out of seven, and that there was ultimately no reproduction of disease, that his patients were very fortunate. I suppose when he said this, that he could only have had a knowledge of some of the patients for a short time after the operation, as I have no idea of any such success attending the removal of the organ when the disease is really cancerous.

Suppose the case to have proceeded so far that we do not like to propose or to perform the operation; what are we to do then? We have only to palliate the disease; to mitigate the distress and pain of the patient, and to render his remnant of life a little more bearable than it would otherwise be. When the pain is very severe, and the constitutional disturbance excessive, we can do nothing but administer narcotics; and it is in the advanced stages of the disease necessary almost to stupify the patient with them to afford any relief to his sufferings. The local application of opium often gives relief, especially in the ulcerated stage; the liquor opii sedativus of Mr. Battley is a local application well suited to cases of this kind. You may begin by employing it in the proportion of two drachms to an ounce of distilled water, and gradually increase the strength, until you use at last the undiluted solution. Lint should be dipped in this fluid, and then applied to the part. Opium may also be used in the form of an ointment, made by incorporating one or two drachms of the finely-powdered opium in an ounce of lard. With respect to the internal treatment, so far as the mitigation of suffering goes, we can only give opium; for the effect of hyoscyamus and conium is very inferior. The progress of these cases is often very slow; the affection may be completely developed and clearly marked, yet it will go on for a much longer time than you might expect before it destroys life. A patient used to come to the Infirmary who had had cancer of the globe for many years. During three or four years that I occasionally saw him, it made little or no progress. We are not therefore to infer that because cases like these destroy life, that they do so rapidly.

The other malignant affections of the globe may very properly be called fungous, or fungoid; and there are two va-

rieties of this disease, which have some circumstances in common.

Melanosis Oculi.

There is the affection called *melanosis oculi*, a protrusion of a soft medullary growth from the globe of the eye; an increase in the size of the globe, with the production of a new substance, which after a time develops itself externally, and is of an irregular tuberculated appearance, but more particularly distinguished by its dark livid or coal black colour. It proceeds to ulceration or partial sloughing, and discharges a dark-coloured bloody or grumous fluid: from these characters has been derived its name of melanosis. It arises in the adult, and is seldom seen until after the middle period of life. In comparison with scirrhus, it is rather rapid in its progress, so that in the space of twelve or eighteen months, the disease may proceed from its origin to its termination. It is attended at first by pain in the eye and the head; the organ becomes amaurotic; it begins to swell about the corpus ciliare, exhibiting a dark livid colour; the lens becomes opaque, and together with the iris is pushed forward against the cornea. The projection continues; the whole of the globe becomes increased in size, the projecting mass is very dark-coloured, and distends the lids so as to make them appear livid; or it may force them open. Now after the front of this morbid growth has acquired a great development externally, an ulcerative or sloughing process commences, and it discharges a thin dark-coloured ichor, or it may bleed very freely. Sloughing generally occurs at intervals, and thus the excessive development of the tumour is prevented, but it is attended with great pain in the eye and head, and great constitutional irritation. It does not affect, as far I have seen, the absorbent system; I have not seen the absorbent glands at all participating in the disease.

When such a diseased eye is examined, we find that the whole contents of the orbit are converted into a morbid mass, which in point of texture and consistence has the medullary character. Some part of it too may even have the greyish or reddish colour of medullary disease; but it is principally or wholly of the deepest coal or soot black colour; and at all events the anterior projecting fungous part is of this colour, though the posterior or deeper seated part should be lighter. It is difficult to describe what this black substance is, of which the principal bulk of the tumour is composed, but it breaks down readily under the finger, and if you put your finger on the tumour, a black inky matter is rubbed off. If this black matter be put into water, it will tinge the fluid black, as the choroid coat does. It appears to be a vascular substance, and seems to make up the principal bulk of the tumour.

This melanose affection of the eye resembles the fungus hæmatodes, or the bleeding fungus of other organs; and it is important, in considering the treatment, that we should know the difference between them. This disease sometimes extends from the optic foramen into the cavity of the skull; this was the case in a woman that came under my notice. This patient was about 45 years of age; she was first a patient here, and afterwards was sent to St. Bartholomew's Hospital. When she came the disease was fully established, but the globe was moveable in the socket, and I proposed removing it; she would not consent to it then, and when she was willing to have it done afterwards, I did not deem it proper, and the disease ran its course in about eighteen months. The globe was so much enlarged, that it distended the palpebræ exceedingly, and was about half the size of my fist, and projecting considerably from between the lids; yet it did not very materially disturb the general health until a few weeks before death. We examined the head and orbit very carefully after death, and we found that the disease was continued by the optic nerve into the brain; the optic nerve appeared as if converted with a black soft substance even into the brain; and under the anterior lobe and penetrating into its interior was a tumour of the same kind of material about the size of a small orange. In the liver we found two depositions of a similar substance, one about the size of a walnut, the other that of a pea.

During the last year a man came here, who afterwards went into St. Bartholomew's Hospital; he was 65 years of age, of an unhealthy appearance, with a sallow complexion; he looked like a man who had injured his constitution by drinking. The eye was removed at his request. The disease, at the time the operation was performed, had existed twelve months. He went on very well for about ten days after the operation, and then got worse; but as far as the operation went, there was every appearance of its succeeding. However, he got worse, and died without any apparent good reason. The body was examined, and the liver was found at least double its ordinary size, diseased throughout. It was filled with tubercles, varying in size from that of a pea to a large orange. Some of them were of the

white or reddish medullary structure, others of the deepest black, and there were all intermediate appearances.

A woman having this disease, came to the Infirmary during the last year; the eye was removed by Mr. Tyrrell, she perfectly recovered, and is now living in the country; she was in good health the last time we heard from her.

Such is the progress, and such are the effects of this melanose disease of the eye. Some of the circumstances belonging to the disease, as just explained, are obviously unfavourable to operation; there is the chance of disease being continued within the skull, or of other organs being affected; and it is possible that the soft parts remaining in the orbit after the operation, may take on the same kind of diseased action. On this account, therefore, we should never undertake the operation, excepting under the most dubious prognosis; we should rather leave it to the patient to decide the question, than urge or strongly recommend the operation. In many instances, however, there is great reason to believe that the extirpation of the disease has been permanently successful; so that the prognosis of operations is by no means so decidedly unfavourable here as in cancer or fungus hæmatodes. The earlier it is performed, the better is the patient's chance.

Fungus Hæmatodes.

The most frequent form of fungous disease is the fungus hæmatodes, and this affection occurring in the eye, is similar to the fungus hæmatodes in any other part of the body. It is a conversion of the globe of the eye into a soft and apparently medullary texture, of a yellowish, whitish, or reddish colour, approaching more or less in appearance to the medullary substance of the brain. The whole of the globe appears to be converted into this substance, and continuing to enlarge, at length protrudes itself in the form of a fungus, distending the lids, or projecting between them; ulceration or sloughing ensues, and produces at last the destruction of the patient by the bleeding, severe pain, and great constitutional irritation which it produces.

Diagnosis.—Fungus hæmatodes has generally been confounded with *cancer* of the eye, but it is distinct from that affection in its development, progress, and symptoms, and in the age of the subjects whom it affects. Cancer never occurs until after the middle period of life, and I think we may say the same of the melanosis oculi; but fungus hæmatodes occurs in the young, and sometimes in very young persons, even within a few months after birth; the greatest number of instances occurring in children of from two to four years of age. It is not, however, confined to youth; there are two instances recorded in Mr. Saunders, posthumous work, which, from the description, we must suppose to be cases of fungus hæmatodes, in persons of thirty-four and seventy-five years of age. There is an interesting paper on extirpation of the eye in Dessault's posthumous works, edited by Bichat, who states, that the patients operated on by Dessault for cancer of the eye, were chiefly children. In Mr. Wardrop's instructive work on fungus hæmatodes, which contains the first discrimination of this important affection as a distinct disease, and so admirable an account of its origin, progress, nature, and treatment, that nothing has since been added, he says, twenty out of twenty-four cases of fungoid diseases of the eye, are fungus hæmatodes; I do not know on what data he has formed this estimate, as it falls to the lot of very few persons to see twenty cases of this affection.

Fungus hæmatodes appears first in the bottom of the globe, and makes its way from thence outwards by ulceration. In what we may call the first stage of the affection, we see a tumour rising from the fundus of the eye, instead of the pupil being of a jet black, as it is in the natural eye, it appears of a bright yellow colour, as if there was a metallic plate situated in the fundus of the eye; and this appearance is so remarkable, that it attracts the notice of the person attending the child. It appears as if there was a medullary mass growing from the bottom of the eye, assuming occasionally a tuberculated appearance, over which is seen the ramification of red vessels, as if the arteria centralis retinæ was pushed up and extending over it. These are all the appearances we can observe in the first stage. In the second stage of the affection, the yellow or whitish fungus increases in size, occupies a considerable portion of the eye, causes a displacement of the natural textures, and the various effects on vision, the consequence of such growth. The lens loses its transparency, and is of a light amber colour; the iris changes in colour, and becomes of a greyish or yellowish brown; and there is external redness. At this period of the second stage, the appearance most strongly characterising the affection is lost sight of; in the first, you can observe the gradual growth of the fungus, but in the second, it is concealed by the cata-

ract. In the third stage, there is an increase of the external redness, and of the pain, from the growth of the morbid structure, and the consequent distention of the globe. The tumour increasing, will come through the iris and cornea, or through the sclerotic coat, and then we have the fungous growth projecting externally. When the complaint has proceeded thus far, you will find that the fungus remains covered by the conjunctiva; but this becomes also ulcerated, and bleeding takes place from the surface of the fungus, followed by the discharge of an ichorous or sanious fluid, which irritates the lower lid and cheek. In some instances the conjunctiva is distended to a great degree; an immense tumour is formed by the fungus, without ulceration of the conjunctiva accruing, almost half the size of child's head. When the complaint has proceeded thus far, it is attended with very great pain, with great constitutional irritation, restlessness, thirst, want of sleep, and disturbance of all the functions of the body. Sometimes there is an affection of the lymphatic glands, but sometimes not; the cheek becomes excoriated by the acrid discharge from the eye, and worn out by the great irritation, and, excessively emaciated, the child sinks

On examination of these cases, we find the appearances very similar to those presented by the melanosis oculi, excepting its peculiar characteristic colour. We find the contents of the orbit converted into a soft reddish medullary mass; and this diseased change sometimes extends by the optic nerve into the brain, following the course of the tractus opticus, and the thalamus nervi optici. Similar depositions of this fungoid matter are occasionally found in other parts of the body.

The nature of the disease seems to be essentially similar to the melanosis oculi; but the peculiar black matter characteristic of the latter, I have never seen in any case of fungus occurring in the young. Now all the observations which have been made with respect to the destructive nature of cancer oculi, and the melanosis oculi are applicable to the fungus hæmatodes. It proceeds, without our being able to interfere by any mode of treatment, to the destruction of the organ, and ultimately of life. The only question is, whether it would be expedient to remove the part at a very early period of the affection? The propriety of any operation can only be considered in those cases, in which we can see the affection in its early stage; but I am sorry to say, that the present state of our experience leads us to believe that the result is just as hopeless in the early as in the advanced stages. Mr. Wardrop removed the diseased globe from a very young infant, where the figure and size of the organ were not altered, when the metallic appearance was seen in the pupil; and yet that case proved fatal. I am not aware of any single recorded instance of a favourable issue of the operation, and I believe there is none. There is an account in the 19th volume of the Edinburgh Medical and Surgical Journal, furnished by Mr. Wishart, of Edinburgh, of the successful extirpation of an eye affected with fungus hæmatodes. The opinion of a gentleman so thoroughly conversant with the subject as Mr. Wishart is, deserves every respect; but as the result of his case is opposite to the entire experience of all other persons, we naturally scrutinize the evidence very closely. The dissection of the removed parts is not described with the detail and minuteness necessary to remove all doubt of the case having been true fungus hæmatodes. Therefore I do not at present consider the report of that case to invalidate what I have said as to the uniformly unfavourable result of the operation. This alone might be a sufficient reason to prevent our proposing the operation; but there is another objection almost equally strong, namely, that many cases occur of changes of structure producing all the visible appearance of fungus hæmatodes, and which have not turned out to be malignant; changes of structure, which have not proceeded to the destruction of the organ or of life. A case is recorded by Mr. Travers, in which the operation was performed under the supposition of its being fungus hæmatodes in the early stage. It turned out on examination to be a conversion of the vitreous humour into a substance like boiled rice. We have seen children at this Infirmary with the appearances of fungus hæmatodes in the first stage, namely, the altered colour of the pupil, the metallic reflection in the bottom of the eye, and so on. The uniformly unfavourable result of extirpation has deterred us from proposing the operation. Yet in some instances, very contrary to our expectation, the case has remained for some time in that state, and afterwards, instead of destroying, the globe has shrunk and become atrophic. Now the knowledge that such cases may exist, and that they may go on to a natural cure, is a strong reason against proposing what I cannot help calling a very cruel operation. It must be most painful to the feelings, both of the surgeon and friends, to subject a child to this frightful operation; and no man could bear to think of

it, unless he were convinced that the painful mutilation was not only necessary, but certainly effectual in saving life.

If then we abandon the operation in cases of this kind, we have to consider what we can do in the way of palliative treatment, and we find that the same measures must be employed as for cancer, namely, the local application of the liquor opii sedativus, either diluted or otherwise, and the internal use of opium. I have found the former very serviceable in lessening the severe pain attendant on the disease.

Extirpation of the Eye.

It is necessary for you to know how this ought to be done, although the views I have given you of these diseases are not very favourable to its performance. Yet there are some cases in which it may be advisable to give the patient the imperfect chance of relief, which the operation affords. It is by no means difficult to the surgeon, although very formidable to the patient. You should in the first place carefully prepare the patient You should pay attention to the state of his health for ten or twelve days previously, so as to bring him into the most favourable state for the performance of the operation. The globe is almost invariably enlarged, therefore it is desirable that you should get room to perform the operation, which the ordinary extent of the fissure of the palpebræ does not afford; it is therefore necessary to slit up the external commissure of the lids, so as to enlarge the anterior aperture of the orbit; you then cut through the conjunctiva at the lower part of the globe, and the origin of the inferior oblique muscle; you dissect the surface of the diseased mass from the bony cavity, as far back as you can reach with the knife. Next you repeat the process above, you cut through the conjunctiva and the tendon, of the superior oblique muscle, and then separate the parts from the orbit by dissecting as close as you can upon the surface of the bone; recollect that the object is to remove the contents of the orbit as effectually as possible, so as not to leave any behind, and perhaps this may be most conveniently done by a common straight double-edged knife. When you have proceeded thus far, when you have detached the globe from the orbitar cavity above and below, it only remains connected to the orbit by the optic nerve, and the origin of its muscles. You have to cut through that connexion, which may either be done by the same knife, or by a double edged knife, curved breadthwise, or by a very strong pair of curved scissors. If you use the knife, the best situation for passing it in will be from the external angle, as the external side of the orbit passes obliquely from without inwards; you cut through their connexion as far back as you can, and then you remove the globe. If the diseased mass cannot be easily held by the finger and a piece of lint, it will be necessary to pass a needle armed with a strong ligature through it.

You might expect, and you will find, that the ophthalmic artery will bleed freely; the bleeding from the branches of this artery, which you divide in the course of the dissection, fills up the cavity, so that you proceed in the dissection entirely from your knowledge of the anatomy of the part. The bleeding is very free from the ophthalmic artery, but it may be stopped without securing the orifice of the vessel: if the bleeding continue long, it is only necessary to have a piece of lint rolled up as a compress, and pressed on the artery; and the pressure should be continued for some time. Thus the contents of the orbit being removed, which is the best mode of proceeding? You are generally advised to put soft lint into the orbit, or soft sponge; but if you reflect, you must, I think, see the absurdity of that practice. You have a wounded surface, quite a fresh wound, and what do you do with a recent wound in any other part of the body? You put it in the most quiet state, that inflammation may not occur in it. Now the prevention of inflammation is of great consequence here; the wound is close to the sensorium, it is connected by continuity of surface with the interior of the cranium; the optic nerve is divided close to the brain, and when these things are considered, the occurrence of inflammation must be seen to be a very serious circumstance. Put no extraneous matter whatever into the wound; reunite the divided palpebræ with one or two sutures; let the patient be put to bed, and rags moistened with cold water be put over the lids, and removed as often as they get warm. After you have removed the globe from the orbit, put in your finger and feel the whole of the surface of the orbit, and dissect away every soft part that you may find there, especially the lachrymal gland. Subsequently to the operation, your attention will be directed to keeping the patient very quiet; to keep him on a spoon diet, to keep the bowels open, and watch the case carefully for some time afterwards. The bony cavity granulates, and in some measure fills up by the depositing of a newly formed vascular mass

and the eye-lids fall inwards, so as to appear concave. There is no support for an artificial eye, nor indeed sufficient cavity to receive it; so that the person who has undergone this operation, must wear a green or black patch over the eye, if he wishes to conceal the consequent deformity.

LECTURES

ON THE

THEORY AND PRACTICE OF PHYSIC,

By DR. CLUTTERBUCK.

Theatre, General Dispensary, Aldersgate-street.

Lecture XXXIII.

Of the Diseases of the Circulatory or Sanguiferous System.

Gentlemen,

In a former Lecture I gave a general account of the organs which circulate the blood, namely, the heart and blood vessels, and spoke in a general way of the disordered states of circulation, as depending upon the latter. I am now to treat of the particular affections to which the heart itself is liable, and which we shall find to be of great importance, both from the distress which they occasion to the patient, and the danger to which they often lead. To make the subject properly understood, we must here, as on other occasions, advert a little to the physiology; that is, the nature and functions of the parts concerned.

The heart is a muscular structure of considerable power, though of much less influence in regard to the circulation of the blood than is supposed by some. I have before given my reasons for believing, with many physiologists of high reputation, that the heart has but a small share in the movement of the blood, the blood vessels themselves, by their contractile power, chiefly effecting the purpose. I shall at present, therefore, direct your attention to what I formerly said on this subject, and to the authors then referred to.

The heart is to be considered as a double organ, or rather as two hearts placed side by side, and intimately connected; both acting together, yet for different purposes: the one, the right or anterior, being destined to carry the blood by the pulmonary artery to the lungs only; the other (the left or posterior), by the aorta, and its branches distributing it throughout the general system.

These two sides of the heart, have no direct communication. The *venous* blood is sent from the right side, or ventricle, to the lungs, in order to be supplied with what it had lost during its circulation through the body, or in other words to be *arterialized*; whence it returns again by the pulmonary veins to the left side of the heart, from which it is distributed throughout the body, by the aorta and its innumerable ramifications.

The heart is a very vascular part, and at the same time highly irritable; hence it is prone to inflammation, and all the consequences of this. It is, however, deficient in sensibility, or conscious feeling, as compared with many other organs, and which is perhaps more to be ascribed to the nature of its nerves than their paucity. The result of this insensibility is, that we are not conscious of its movements, at least in a healthy state of the organ, though in disease it often acquires sensibility, so that its movements are strongly and painfully felt. Being a muscular structure, it is of course liable to the diseases of muscular parts, such as spasm, convulsion, and, probably, paralysis.

The heart is liable to be excited and disturbed in its actions by a great variety of causes, as well mental as bodily. Most emotions of mind influence it, but in different ways, according to the nature of the emotion produced. This must be particularly attended to in the diseases of this organ. It is likewise much influenced by the brain, its movements being liable to be accelerated or retarded, or made irregular, according to the state and condition of this organ. Muscular exertion, by accelerating the return of blood by the veins, excites and often disorders the action of the heart. Lastly, inflammation existing any where in the system, if at all considerable, has a strong tendency to excite disorder in this organ, as is observed in febrile states of body, in which the heart commonly participates.

We are at present, however, to consider the primary or original affections of the heart, and which may be reduced to two general heads,—1. Inflammation (*carditis*), and its consequences. 2. Irregular or disordered action, not necessarily connected with Inflammation.

Of Carditis, or Inflammation of the Heart.

You are to consider me as speaking of inflammation of the heart altogether; for though it is easy to imagine that its different parts may be separately affected, or the substance of the organ as distinguished from its investing membrane, the pericardium, no such distinctions can be made in practice with any certainty or advantage.

Carditis is a much more frequent disease than has commonly been supposed. It may exist with little pain, and on this account is liable to be overlooked; and another reason is, that the definition usually given by authors is very imperfect, as I shall endeavour to show you presently.

The definitions of *carditis* given by Dr. Cullen and other writers, are objectionable, as containing characters not essential to the disease, and which, in fact, are most frequently wanting. Such are cough, irregular pulse, palpitation, and syncope. Relying upon these signs, you are in danger of overlooking the disease in many instances. The only signs that are invariably present, appear to be the following, which, therefore, properly constitute the definition. "Pain or other uneasiness in the region of the heart: disordered function: and *pyrexia*, or a febrile state of the system"—all the rest are occasional only.

Inflammation of the heart, like others, may exist in different degrees; and hence the division into *acute* and *chronic*. You should, however, bear in mind, that there is no essential difference between the two states. Nevertheless, as the treatment is modified to a certain extent by the degree of the disease and its duration, it is necessary that some distinction should be made. I shall speak first of the disease in its most acute form.

Acute *Carditis*, then, is easily recognised by the common signs of inflammation, viz., more or less of pain or other uneasiness, in the region of the heart; disordered function of the part; and *pyrexia*, or a febrile state of system. These will require to be spoken of a little more in detail. *Pain* is rather an equivocal symptom in inflammation of the heart, on account of the natural insensibility of this organ. There is, however, in almost all cases, more or less of uneasiness felt in the region of the heart, and which often amounts to actual pain, though we cannot, for the reason mentioned, estimate the degree of the inflammation by the degree of pain present. A peculiarly distressing sensation is experienced on these occasions, which has been called *anxiety*, (not mental anxiety,) and which words are scarcely adequate to describe.

Next, with regard to *disordered function*; this is an invariable attendant upon inflammation, wherever seated. So here, the action of the heart will be disturbed, and which will be generally, though not always, discoverable in the pulse. The first and simplest effect of inflammation is to increase the irritability of the heart, whence it is disposed to contract more frequently, and when but a small quantity of blood is received into its chambers. The pulsations in consequence are frequent, and at the same time quick: these qualities are communicated to the pulse at the wrist, which is also small and hard. On some occasions, there is *palpitation*, which the patient is often sensible of by his feelings, and which can be readily felt when the hand is placed over that region. This irregular action of the heart, though generally perceived at the wrist, is not always so: a fact which shows decisively the power of the arteries in regulating the movement of the blood.—Sometimes the heart is said to cease from acting altogether for a time, and then *syncope* necessarily takes place. But neither syncope, nor palpitation, nor irregular pulse, is constantly present; on which account I have excluded them from the definition. The irregularity of action, of whatever kind, is always increased by exertion, either of body or of mind.

There is one circumstance deserving your attention, by which otherwise you may be misled, as I have been; for it has been little if at all noticed. I mean, the pulse at the wrist becoming imperceptible, but without syncope or actual fainting, the patient retaining perfect consciousness at the time. This appears to be owing to the heart being in such a state of contraction, as barely to admit blood enough into its cavities to support the circulation, but not enough, when thrown into the arteries, to produce a perceptible stroke in the smaller and remoter vessels. This state requires to be distinguished from ordinary syncope, as the active *stimulants* usually resorted to in the latter case would be generally improper in the contracted state of the ventricles arising from inflammation. The distinction is sufficiently easy, if you attend to the following circumstances. In *carditis*, the failure of the pulse is owing to the contraction of the ventricle, amounting almost to a state of spasm; and it is attended with acute pain about the heart.—There is likewise perfect consciousness, and a feeling of much distress, which is

expressed also in the countenance. The tongue is furred, as in inflammation in general. But in real and ordinary *syncope*, the heart, instead of being in a state of contraction, has ceased to act altogether, or nearly so. There is neither pain nor consciousness, nor is the tongue likely to be furred.

Carditis is liable to be confounded with pneumonia. Vogel, a Dutch writer, says the symptoms of *carditis* are nearly the same as those of pneumonia; and Dr. Cullen himself says he has seen many instances of the pericardium being inflamed, with none but the signs of peripneumonia being present. The fact is, that the two diseases are often combined, the inflammation readily spreading from one part to the other. When the heart or pericardium is affected in pneumonia, the pulse becomes quickened in an unusual degree, and is often irregular also. The action of the heart may be rendered extremely frequent, and also irregular, by disease in the brain. This is to be distinguished from a primary affection of the heart, by being attended with pain in the head and other signs of disordered brain, and by freedom from pain about the heart itself.

Causes. The causes of *carditis* are any of the common ones of inflammation; as *cold*, and injuries of the part; violent exercise, such as running up hill, which I have seen produce the disease in a dangerous degree. Violent emotions of mind are also adequate to the effect; in short, whatever greatly disturbs the action of the heart, and impels the blood suddenly and forcibly upon it, may have the effect.

Carditis sometimes arises during the course of other diseases that are attended with an excited state of circulation; particularly *acute rheumatism*. The affection in such cases has been called *rheumatism of the heart*, and treated accordingly; that is, *bloodletting* has been neglected, and, perhaps, *stimulants* used. This, however, is improper, and may be attended with bad effects. *Rheumatism* is an inflammation of ligamentous structure; and the term rheumatism should be confined to this.

Terminations. *Carditis*, like other inflammations, terminates favourably in many instances; and especially if early attended to, and actively treated. Or it may end quickly and fatally, by interruption of function, the heart contracting so forcibly as to put a stop to the circulation altogether. Should the disease prove fatal in this way, it might leave no trace of disease discoverable after death; for the contraction would cease with life.

Carditis may terminate in any of the other usual modes; as 1. By adhesion of the pericardium to the heart, by which the cavity of the sac would be obliterated. 2. By serous accumulation in the pericardium, giving rise to dropsy of this cavity, (*hydrops pericardii.*) 3. By abscess or ulceration; and even by gangrene, as you will find stated by authors. Such a termination, however, must be rare; for it is likely that the organ would be in general rendered incapable of performing its office, before the disease went this length.

Treatment.—This is very simple, being that of inflammation in general. It should, however, be prompt and active, on account of the danger of the disease, and its consequences. *Bloodletting* is, of course, the principal remedy, and often requires to be carried to a considerable extent; afterwards, *blistering*. The *digitalis* is particularly well adapted to this disease, by its power of diminishing the irritability of the heart, so as to render the pulse less frequent; should it not produce this effect after a few hours, it will sometimes be useful to substitute *opium*, especially where the pain is acute; but, generally speaking, *opium* had better be avoided, as it makes it difficult to ascertain the real state of the disease. Nauseating doses of antimony are probably useful after bloodletting has been carried to the necessary extent.

There is nothing of greater importance in the diseases of the heart in general, than quiet both of body and mind. Absolute rest in the horizontal posture, ought to be considered indispensable in most cases of the sort.

When the heart becomes inflamed during the course of acute rheumatism, the disease may be expected to yield more readily to the use of remedies, than when it arises as a primary affection. *Bloodletting*, however, is necessary in this case, though perhaps not to the same extent. Endeavours also should be made to reproduce the rheumatic affection of the limbs (supposing it to have declined), by applications of a stimulant and even painful nature; such as *blisters*, or the *mustard poultice*.

In the extreme case I mentioned, where the pulse is scarcely to be felt at the wrist owing to the strong and almost spasmodic contraction of the heart, there is some difficulty in obtaining blood by venesection. In this case, cupping glasses, with scarification, should be resorted to; and when a few ounces have been thus drawn, you will probably be able to feel

the pulse returning. The cupping may be repeated in a short time; and on each occasion the pulse generally becomes more free, the heart contracting less forcibly, and thus admitting a greater quantity of blood into its cavities. Thus by degrees, the circulation is restored, and blood, (if necessary) may be taken from a vein. This is a state of disease in which a tolerably large dose of *opium* would be likely to be serviceable, by lessening the irritability of the heart, and, of course, its tendency to contraction.

Slow or *chronic carditis* is of very frequent occurrence; sometimes taking place alone, but mostly in combination with pulmonary disease. The symptoms, though milder, are of the same character as in the acute form; and it is induced by the same causes. The treatment also is in all essential points the same, being in both cases simply antiphlogistic. The utility of small and repeated bloodlettings in these cases, aided by the *digitalis*, and confinement to the horizontal posture for many weeks, is very striking. In several instances that appeared almost hopeless, and in which I had given a most unfavourable prognosis, supposing that the disease had already occasioned fatal disorganization, the patient has nevertheless perfectly recovered. In a few extraordinary cases, of which I have preserved the history, the patient has been bled sixty or seventy times, and even more, within the period of two years that the disease lasted, and yet has recovered perfectly. The patients in these cases have become exceedingly pallid, but have retained a tolerable share of fullness of habit, without showing any tendency to dropsy. They have generally felt so much relief from the bleeding, as to call for it of themselves, and often more frequently than I have been disposed to allow of. Of course, in these instances, the injury sustained by the parts was less than had been apprehended, which is an encouragement to persevere steadily in our endeavours to cure; since we can have no certain knowledge of the actual state of parts, and ought therefore to take the most favourable view of the subject.

SKETCHES OF THE SURGICAL PROFESSION IN IRELAND.
No. XI.

MERCER'S HOSPITAL.

Characters, &c.

[*Continued from page 506.*]

THE echoes of the combat, however, had scarcely died away, when the hilarity of the scene was again revived by one of those ludicrous exhibitions that sometimes occur in a Dublin Hospital during the examination of that singular compound of cunning and simplicity, the Irish intellect. I copy the circumstances from recollection, and claim indulgence for the errors of a memory more sensitive perhaps than tenacious of its impressions. On the consulting "tripod" sat, at the time, a diminutive personage of a very curious aspect. His dress of gaudy tint had evidently seen some service, and manifested as little familiarity with the brush as his matted locks, plumed with the down of the pillow, did with the application of the rack comb. His countenance was tinged with such an intensely chlorotic hue, and contracted into such a medalic pettiness of circumference, that it might have been mistaken for a bass-relief sculptered on a gall-stone. His eye stared through a halo of misty light, as rayless as the moon through an autumnal haze, and his beard, which was black, and of more than one day's growth, stood out from his chin in grisly luxuriance, as if imploring the assistance of some charitable barber. His lips were kept by compression alone, from expanding into a perpetual yawn; and his whole features partook of that dreamy expression which the face assumes when the senses, half awakened by the morning-beam, struggle to shake off the lethargy of sleep. I was startled, I confess, by such an apparition, and almost believed that the genius of the "Sheriff's Prison" had come to play the doctor in mockery of my notions of the dignity of that character. The wandering of my fancy was soon recalled to reality, by the entrance of a gigantic hawker of fish; her mouth, in the effort to say something, spasmodically thrown open like the jaws of a gasping cod. Are you costive? exclaims the little Pæon, in a husky baratone, as if aroused by her formidable appearance: "Och! your honour! in troth I don't well know what is't that ails me," the hem of the respondent's nether garment touching the boards in a profound courtesy; "How many motions, then, have you in the day,

Ma'am?" with increased emphasis, and all eyes now turned to the rencontre: "An that's beyant countin, honey, for am'nt I runnin up and down the town de live long day wid dat ould basket dere on my head." "Why you confounded old witch, I want to know how often do you go to stool?" "Jist as often as I can, jewel, and dat's not very often, ony now and den at a jintleman's hall door or de likes, whilst shellin de pays, or opinin de oysthurs." "Curse your peas and oysters! tell me how often are your bowels open?" "Little enow, doctthur dear, bnd aboud a couple a hundred or dere aways, since de riz de price of de Carlingfords on de creturs, God help lnz." "Out of my sight, yonrself and your infernal oysters, I'm talking about opening yonr bowels." "God's blud-an-ouns, what's this for! Arrah! patience, a rich-ma-chree, an don't be angry wid a poor cretur of my sort, for sure if it's dem you'd be talking abound, it's just tree days to-morrow since de war opined, wid de blessing of God."

The gravity of philosophy itself could scarcely resist the influence of the spectacle, and I added my mite of laughter to the general chorus, while the enraged Pæon was dismissing the confounded nymph of Ringsend, with a pill or a mixture, quite regardless of the "Key-Letters" of Paris. While this storm of pleasantry was at its height, it was curious to observe how the sound of merriment subsided into the silence of respect for talent and dignity, in the approach of that master-spirit of the scene, the late president of the College, Alexander Reid, I had almost said "Alexander the Great;" for saving the difference between holding empire over the satraps of a hospital, and the princes of the earth, I perceived that the plenitude of his sovereignty in his own sphere was as perfect as that of his imperial namesake. But omitting a comparison of the "Autocrat" of Mercer's with the "hero of the Granicus," I was struck by his demeanour and appearance, and inquired into his history. I learned with some surprise, that a man of his stoical deportment was at one time a "first rate swell;" set the fashion to half the professional "bloods" on town; could bound over any church-yard-wall in a case of surprise; and pommel half a dozen of "charleys" to his own suit in a resurrection spree. But of the elastic limb, light heart, and fashionable addictions, the rheumatism and official cares have left us but the shell, if I may say so, in which these juvenile attributes once effervesced. At present a stick supports his painful steps; his manner of address, to one unacquainted with him, might seem to border more on the condescension of misanthropy than the mere reserve of polite civility; and his dress might now be described as negligently elegant, if the Gordian convolutions of muslin into which his neck-cloth folds across his breast did not betray some lingering devotion to the goddess of *bon ton*. His features, in a state of quiescence, were peculiar rather than expressive of the predominancy of any particular faculty of the mind; but when excited by thought, a grim dissociation of the lips unveiling a liberal surface of ivory, a stern fixedness of look, and an inspired rigidity of attitude, communicated to his delivery of a prognosis the character of a Sardonic revelation. Though holding his appointment, I believe, for many years, he is still a young man; and the peculiar advantages which he possessed, seem to have been cultivated with success. His observations on disease were highly indicative of an ingenious mind. In cases of doubt, no hesitation of acknowledging that nothing was to be known; in obvious matters, no catering to self importance by mystifying the plain truth; in difficulties, no delusion; in certainties, information alone. He seemed in such instances above the paltry artifice of being accounted clever on the chances of a guess. A patient investigator of nature, he is a competent pilot to the inexperienced, and I was gratified by observing, that when advice was sought with becoming zeal, it was invariably imparted with good will, and he was consequently a favourite with every student capable of appreciating so liberal a guide. His general conversation, from being enriched with much of the matter-of-fact acquisitions of experience, and having an agreeable flavour of books along with the style in which he spoke, led me to suppose that the materials of instruction not only float in his mind, but that he also possesses the power of reducing them to an available form. To the qualities of an accomplished surgeon, he adds, in a superlative degree, the knowledge exclusively claimed by the physician; and in the management of that multifarious burthen on the memory, the "Materia Medica," I have rarely seen him surpassed by any professor of his own art. Neither are the moral principles of the man exceeded by the attainments of the surgeon. His strict adherence, indeed, to the letter of propriety, struck me as throwing a shade of the "Heautontimornmenos" into his conduct, which, with every respect for the

cause, will sometimes force a smile from the spectator, as it did from me on this occasion. For while passing through the wards some person vociferated "whiskey," another cried "tobacco," (luxuries indulged in by the inmates of hospitals to the great risk no doubt of the fire-engines being brought into requisition,) with the intention of bringing the subject under his notice. The perfume of the latter drug threw his sensorium into a convulsion, and he really looked as if the flames had already made some progress in the devastation of the edifice, while he enunciated "Mr. Booth", with a syllabic emphasis truly awful. The meekest of God's apothecaries, after a pause, entered with the face of a truant and a passive humility of expression, as if not unaccustomed to similar calls, and forcibly reminded me of Goldsmith's schoolboy as he turned in dumb compassion to towards the querist, yet somewhat anxious to trace "The day's disasters in his morning face." The nurse was next summoned, and a Mrs. Somebody made her bow. Of the alarming seriousness that followed, during an investigation in which I momentarily expected the stick would have inforced the logic of passion, I could not hope to give any idea, unless I could print the faces of the parties, and set their tones to music; while the humour of the scene was considerably enhanced by observing the unruly wag, who had given the false alarm, thrust a fuming cigar into his pocket.

Such, however, was the gentleman whose glances as he passed the "Board Room," stilled the noisy worship of Comus, and called all hands to work. His merits, indeed, may have been magnified by the medium through which they were seen, as light acquires additional brightness from being viewed in the dark; but virtue, like the diamond, is increased in value by its scarcity: and in this instance I may well be excused for rating his worth at a famine price.

I had now an opportunity of seeing another of these personages who wield the scalpel of Mercer's. He advanced towards us in double quick time, as if on some important errand, his thumbs impacted into the arm-holes of his vest, and his brows corrugated into an habitual frown. The pitted cicatrizations of his visage indicated an era in the history of beauty anterior to the discovery of Jenner, and the aristocratic inflation of his air would lead one to believe that the days of "Feudalism" had not yet expired. He nodded to some indentured vassal, as if conferring a boon, buried his head between his shoulders in a shrug, and, with the clutched satisfaction of the feline race, purred something about the pedigree of the new Member for Dublin in a guttural compound of the English, Irish, and Scotch accents. Though short of stature, he seemed to stand very high in his own opinion; and understanding that he had taken to give "Lessons in Elocution," I thought I might as well witness the expansion of his mind as I had the turgescence of his person. I therefore followed on to the scene of action in a back-house of the hospital, where, before a table covered with scarlet cloth, he commenced reading some surgical "pic-nickery" on urinary complaints, produced, as he observed, by affections of the mind, such as grief, fear, and *tetanus!* and proceeded at such a rapid pace that I was not at all surprised, when at the conclusion he remarked, with a sweep of the head, (the *atlas* making many a full revolution on the *dentata*,) "that indeed he had not yet acquired the tact of knowing how much matter would suffice for an hour's perusal, but he hoped that would be sufficient for that day.

So thought I too, Mr. Ainleek, as I mused on the metastasis of tetanus to the mind, a discovery that surprised me, not less than perhaps the transition of the scene from a lecture room to Morrison's hotel, may startle the reader. But so it is, that a very sensible custom prevails in this hospital, compelling every young gentleman on being bound an apprentice to one of the surgeons, to entertain his fellow students at one of the metropolitan taverns, with a splendid breakfast, or in case of non-compliance with this salutary usage, to undergo the penalty of every variety of the "practical joke;" such as stealing his hat, improving the tint of his cloth with lint and spermaceti; and of being pasquinaded in all manner of ways that playful malevolence can suggest.

I was much pleased with the idea of begining the toils of the profession in so rational a manner, and the courtesy of invitation (for none are admitted of right to these banquets but apprentices) being extended to me, I proceeded in company with my young host on one of these occasions to witness his social inauguration in the joint rites of Esculapius and Apicius. It was a most solemn and imposing spectacle. Only conceive about thirty empty stomachs whetted by the expectancy of a sumptuous repast to a late hour of the day, and then imagine a table such only as Morrison could supply, covered over with rosy slices of Wicklow ham reposing on beds of parsley, cold fowl of most tempting plumpness, and frosted

over with crystals of picromel, steaks, the genuine incarnation of the shamrock, flanked by mountains of sallelun, but, *deficuent vires*, I must leave you to guess the fearful conflict of knives, forks, and mastication that instantly ensued, having all the sublimity of a battle, without the danger. I had here the pleasure of seeing some others of the medical officers of Mercer's in their proper places, as they should have been on so important a festival. Amongst these there was one with regular features of Grecian outline, but without the animation of that school of beauty, and for whom my fancy, ridiculously perhaps, found a comparison in the metamorphure of a "*Venus*" into the other sex. The rounded contour of his form, and the feminine delicacy of his manner, peculiarly fitted him for the duties of an obstetrician; and I learned, with some self-gratulation on the correctness of my views, that Mr. Michael Daniel had consecrated his talents, in conformity with the indications of his person, to the service of Lucina. But the person who had attracted the greatest share of my attention, was an old man, who I understood to be Dr. Hill, and physician to the establishment. By accident he was dressed in the fashion; his coat, to the cut of which he has inviolably adhered for sixty years, presenting then as great a space between the hip buttons, as the most "exquisite" of his neighbours. He talked of the Greek and Arabian lights of medicine, of Rhazes and Avicenna, and the rest of the Fudge-family, and on entering the room, I thought that one of the figures of Hogarth's "Examination at Surgeon's Hall" had descended from the wall, to converse with us on the topics of his day. He seemed to enjoy the repast with much zest, and it was truly consolatory to his junior friends, with the prospect of old age still before them, to behold successive cargoes of every thing on the board descend into the hold of an octogenerian vessel that had sailed in safety across the quicksands of all the climacterics, and whose timbers still promised to withstand the assaults of many another gale.

Highly edified by the festivity of the scene, I gave God thanks, beckoned the waiter, and pledging the "memory of Mary Mercer" in a libation of "Nantz," departed in silence to my home.

ERINENSIS.

FOREIGN DEPARTMENT.

Uber das Wesen der Wasserscheu. Von Dr. A. A. Berthold, Privat docent an der Universität Gottingen, s. 64. 1826.

On the Nature of Hydrophobia. By Dr. A. A. Berthold, Private Teacher to the University of Gottingen, pp. 64. 1825. (Hecker's Annalen, Nov. 1825.)

THE frequent occurrence of hydrophobia in Germany, no less than 1666 having been affected with this disease in Prussia, from 1810 to 1819 inclusive, has enabled the Germans to investigate this complaint on a more extended plan than any other nation in Europe. The result of their investigations has unfortunately been productive of no improvements in the treatment of this disease when once broken out, a circumstance which has stimulated medical men in all parts, and particularly the veterinary surgeons, to examine the causes which produce this disease in dogs. The respective governments have done every thing to promote the inquiry, and it is to be hoped that ere long some satisfactory information will be obtained on this important point. Different opinions exist as to the causes which produce this disease in animals: some think that it is produced by a suppression of the salivary secretions; some from an unsatisfied desire for connexion, and others, from the animals being kept without a sufficient quantity of water. The first of these opinions is advanced by the author of this work, who says, that hydrophobia, which comes on of itself, is produced by a suppression of the salivary secretion from external causes, particularly bad food. According to this theory, a particular metamorphosis of this suppressed secretion takes place, which, exerting an influence on the fluids and solids of the body, disturbs the blood, and operates prejudicially on the solids, so that if some fortunate circumstance does not take place to produce the secretion of the saliva as well as the suppressed seminal fluid, general madness will be the result. This humoral pathological view of the case is not new, since the importance of the salivary secretions in dogs, perspiration in these animals never taking place, is apparent to all, and has indeed been taken into account by most writers on hydrophobia. The unconditional and general power of suppressed connexion, heat, and want of water, in causing this disease, do not appear to the

author as at all correct. With respect to the first of these causes, we will give an account of an experiment which was made by a veterinary surgeon (Greve) to see how far it had any influence.* "In order to see how far an unsatisfied desire for connexion on dogs might produce hydrophobia, I tried, in 1813, the following experiment: I brought on the 12th of March, at 8 a. m. a male pointer, (holding him at the same time by a chain,) to a hot poodle bitch. He immediately prepared himself for connexion, and licked the bitch's organs of generation, but at that instant I pulled him away, without letting him come to the scratch. At ten o'clock I brought him again to the bitch; but let him merely have the same taste as he had at eight. In this way I proceeded for three days in succession, bringing him eight or twelve times each day to the poodle. On the 14th, as I pulled him from the bitch for the last time, he bit at the chain by which I held him. In the evening he became sulky, ate little, and sighed with difficulty. On the morning of the 15th, I brought him again to the bitch, but he shewed little desire to mount her, howled twice in a most extraordinary tone, and then conceiving it not safe to keep him near me any longer, I had him confined in a boarded up stall. I brought him meat, but he did not touch it; he still shewed a desire for water, some of which he took into the mouth, but he could not swallow it."

"On the morning of the 16th he sat on his tail, with his eyes fast closed and his lower jaw hanging down; from the mouth there dribbled a fluid, and every now and then he snapped as if there were flies before him; he also occasionally howled in a peculiar tone. I held a stick before him and he bit violently at it, as well as a piece of wood which was close to him. On this day I bought a healthy dog and a sheep, in order that I might try some experiments with them, but on the following morning I found him dead, with his teeth so firmly fastened in a piece of wood that it was with difficulty I separated them. The examination after death merely showed some inflammation about the œsophagus." This experiment, and some other facts, clearly showed that this cause may exert a considerable influence in producing the disease.

This work contains some valuable information as to the diagnosis of madness in dogs, collected under the direction of Hertwig, a celebrated veterinary surgeon at the Veterinary College of Berlin. The first symptoms observed are a surliness and mischievous turn, which are frequently preceded by a particular liveliness; the liveliness, however, never lasts more than a day, and frequently not longer than a few hours. The most remarkable change takes place in the tone as soon as the madness appears; the dog barks no more, but utters a half suppressed howl. This is so peculiar, that those living in the neighbourhood of the places where the dogs are kept know, by the sound, if a mad dog is among them. That the tongue and edge of the bite are always covered with a frothy mucus is not correct; the eyes also are not always red, as has been asserted by some, but are chiefly dull and shining. The shy and suspicious appearance is the most certain sign which the dog presents, for the carrying of the tail between the legs, as maintained by many, and the dread of water, as stated by others, do not take place in all cases. The author, under Hertwig's superintendence, inoculated three healthy dogs in the head, the one with saliva and the other two with the blood of a dog, which died of hydrophobia; the first one only was attacked with the disease, six weeks afterwards.

The suggestion which the author makes from the theory that he has advanced is, in the treatment of the disease to promote the salivary secretions; but of the author's theory and his treatment we have no great opinion.

In another work, published some time ago,* Dr. V. Schallern, the author whose experience in this disease among animals is most extensive, considers hydrophobia to be a true inflammation of the nerves, particularly of the cervical and palate nerves, and of the part of the sympathetic which goes to the heart, stomach, and intestines, and endeavours to reconcile all the symptoms with this pathological opinion. The treatment which he recommends is the scarification of the wound, the allowing it to bleed, and the use of the actual cautery as soon as the wound is inflicted. If the wound has been made some time before he is consulted, the author still scarifies it and brings it into suppuration by the application of cantharides, red precipitate, and other stimu-

* Erfahrungen und Beobachtungen uber die Krankheiten der Hausthiere im Vergleich mit der Krankheiten der Menschen. B. I. Oldenburg. 1818. s. 152.

* Anweisung der Hundswuth aufeine durch lange Erfahrung erpronte Weise sicher vorzubanen und sie zu heilern Von Dr. Gottlieb V. Schallern. 1824.

lants; the time which the wound is advised to be kept in suppuration appears to be too short, for we have heard from persons who have had an opportunity of witnessing this practice abroad, that for six weeks at least the suppuration must be maintained. The insufficiency of mere excision, or scarification of the wound, has been proved by too many unfortunate cases, and the following case, related by Dr. V. Schallern, confirms it. An ox was bitten by a mad dog above the tuft of hair on the tail; and two hours after the injury the tail was removed above the wound; but notwithstanding, hydrophobia broke out on the ninth day, and the animal, from its insecure state, was obliged to be killed.

THE LANCET.

London, Saturday, July 15, 1826.

COLLECTANEA.

Observations on a case of Inflammation of the Veins after Amputation, resembling Phlegmasia Dolens. By G. J. GUTHRIE, Esq. (*one of the College Council!*)

THIS is not the least extraordinary paper that has been grubbed from the collections of the Hospital gentry to eke out the last Number of the Medical and Physical Journal, whether we regard the omnibus notum character of the facts it contains, or the classical costume in which these facts are arranged. The former might incline us to be silent, the latter obliges us to speak, if it be only to commend the "cut," and induce the other Stulz's* of the west end Hospitals to plume the fashion. Jupiter be praised that we have so good an opportunity of encouraging a liberal science! We are far, however, from wishing to straiten or confine the artists to a particular pattern; all we wish is, to stir up a generous rivalry, and so to benefit the craft. Trusting our motives will be duly appreciated, we proceed to Mr. Guthrie's paper.

It seems that the thigh of a healthy woman, ætat. 28, was amputated just below the minor trochanter, on account of "an elastic swelling of the whole of the knee joint; she suffered a good deal of pain after the operation; an opiate was administered and repeated, and she passed a good night." (Sept. 27, 1823.) The next day the pulse was 100, the patient tolerably easy.

"Towards evening the *stomach* became sick; she (the stomach) vomited a quantity of bilious matter; pulse 120. Three grains of calomel, and one of opium, followed by the common aperient mixture, were ordered, and an enema. The region of the stomach, to which part pain was *referred* (why not was painful?) is to have applied to it equal parts of æther and laudanum.

Oct. 1st. *Better* in all symptoms, but looking *irritable* and *ill*. *No* pain *any where*; no sickness (*any where*); appetite good; pulse still quick.

8th. Two ligatures have come away; the wound looks well; the edges have nearly healed (themselves?) *Eats* meat, and with a good appetite.

9th. *Not so well*; pulse 120; skin hot; *feels ill*; complains of pain in the other leg and thigh, which disturbed her rest; was well purged, and the leg fomented. Towards evening, the pain was principally felt in the calf, and in the heel.

10th. Pulse 130; tongue furred; vomiting again of bile. The pain in the thigh, extending *upwards* to the groin, and *downwards* to the heel, is intolerable, *particularly in the latter* part." (How, then, most noble Deputy Inspector, doth it appear, that the pain *extended* from the middle of the thigh to the heel? Why trace it both ways, when you might have commenced at the heel, son of Machaon?) "The thigh and leg much swelled, and tender to the touch, although without redness. The swelling elastic, yet *yielding* to the pressure of the finger, but not in any manner like an œdematous limb. Mr. Guthrie (I) pronounced the disease this morning to be inflammation of the veins, extending from the opposite side; but after a careful examination, (marry, how?) *and* on pressure, no pain was felt in the course of the iliac vessels of that side, and the stump looked well, save at one small point, corresponding to the termination of the femoral vein." (Where

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* Query, *Stultus's?—Printer's devil.*

is the proof that the inflammation commenced in the veins of the amputated limb? It is much like the lesser pain at the middle of the thigh being the origin of the greater at the heel!)

17th. The symptoms continued nearly the same during the week; the sickness *of stomach*, and purging of bilious matter, abating at intervals.

18th. IS *better*, and the pain is diminished. She *looks* somewhat *better*, but is becoming thinner.

20th. Less pain in the limb; stump poulticed, &c.

25th. During these five days it was interesting to see the patient *eat* and *desire solid* food, and in her extremely emaciated state seem to *enjoy* it." (That is, what she desired; what a play of affinities!) "Pulse *always* from 126 to 136. Is slightly jaundiced in colour, but declares she is better, and *will* get well.

27th. Gradually sunk in the evening, and died.

On examination after death, the termination of the vein on the face of the stump was open, and in a sloughy state; above that, for the distance of four inches, and as high as Poupart's ligament, the *inside* of the vein bore marks of having been inflamed; but the inflammation seems to have been of the adhesive character. Above that point the inflammation appeared to have been of an *irritative* or *erysipelatous* kind; had gone on to suppuration, and the vein was filled with purulent matter, lymph and *blood*, partly coagulated, partly *broken down*. These appearances extended up the cava beyond the diaphragm, and traces of inflammation could be distinctly observed almost into the auricle. This disease had passed along the right internal iliac and its branches; it had descended along the left iliac vein, affecting its branches in the pelvis to the uterus, and along the limb to the sole of the foot. At the left groin, the iliac vein becoming femoral (or the latter the former?) was greatly distended with pus, apparently of a good quality; and if the patient had lived a day or two longer, it would have been discharged by a natural effort, as in chronic abscess. The viscera were healthy."

In his "Observations" on the case, Mr. Guthrie remarks, that inflammation of the veins after amputation "most frequently occurs where the patient has previously been in an irritable or *suffering* state. It is of two kinds," he continues, "the adhesive, or *healthy*, and the irritative or unhealthy, embracing all the shades of inflammation *between* them!" Oh sancte Jupiter! We pray thee Guthrie, to detect a *shade* between health and illness? *Between plus* and *minus*, friend! *Between* attraction and repulsion! It is impossible; for where one state ceases the other begins. We are further counselled that "healthy inflammation is seldom observed, *when it takes place*, and *when* observed is usually cured;" that is, we suppose, when it does not "take place." But *healthy* inflammation may be *cured*, and that is enough. "The unhealthy is almost as invariably fatal." "I have seen it destroy—*I had nearly said*, hundreds; being in fact the most common cause of death after amputation." Why did'n't you *say* hundreds? It is but a figurative expression, you know! He proceeds,

"When a person, after undergoing this operation, is about to suffer from *unhealthy* inflammation of the veins the pulse quickens, and continues above 90, and generally from 100 to 150, until his dissolution; the *stomach* sickens; there is (are) for the most part frequent *attacks of vomiting*, usually of a bilious character, followed by the common symptoms of fever; he is *restless*, *sleepless*, and *anxious*. There is, (are) in general, after the first three or four days, some marked paroxysms of fever, with remissions (RIGORS.)" REMISSIONS! RIGORS! So indeed Mr. Guthrie hath it. "The patient *emaciates* rapidly; the skin becomes tinged of a yellow hue, and often covered with perspiration; bowels irregular. The pulse becomes weaker and more irritable, and increases in frequency as the disease goes on. The patient gradually sinks; or the febrile symptoms subside, with the exception of the frequency of the pulse, which may *even be* diminished; he rallies a little, and the appetite returns; but whilst he says he is better, and will get well, the daily, nay almost hourly, *deterioration of the appearance* is well marked, and a *slight* accession of fever soon closes the scene. The stump is not in more pain than in many other cases, in which no *inconvenience* follows."

Now in all that is reasonable in Mr. Guthrie's communication, what is there

that is not familiar to the veriest tyro in surgery? Who that has read the discourses of Abernethy, the observations of Carmichael, or even the essays of Travers, to say nothing of Cooper's Dictionary, and the excellent work of Mr. Hodgson, does not know infinitely more of the subject than Mr. Guthrie? In truth, nobody. So far from his "case giving rise *synthetically* to phlegmasia dolens from a similar, although not the same cause, occurring in a different manner," and tending "to confirm *analytically* the etiology and pathology of this disease (phlegmasia dolens) as advanced by Dr. Davis," it is the most ridiculous jargon and tomfoolery that we have lately met with in a medical journal, the far-famed Mausoleum not excepted. As to "the evolution of heat, the sudden and great enlargement of the whole of the superficial veins, with the severity of the pain experienced at all times, and augmented to agony on the slightest motion," being "the only perceptible differences, and those only in degree to be observed between it and a case of phlegmasia dolens, *either* by comparison with what" HE "*recollected or recollects of cases previously or subsequently seen*," valeat quantum valeat, we leave him in full possession of his very acute diagnosis, only expressing our surprise that a man who has seen we "had *almost* said hundreds" of cases of *unhealthy* inflammation of veins "terminate fatally;" should make the last of them "give rise *synthetically*," and "confirm *analytically*," the pathology of a disease to which, by his own showing, it is diametrically opposed, not less by its nature and mode of attack, than by its causes, its symptoms, and usually by its result

Such is the paper of the redoubtable Mr. GUTHRIE; such the observations of a Member of the Council of the renowned College in Lincoln's-inn-fields; such the acute reasoning, such the syllogistical arguments of a Member of that Council which presumes to treat with contempt the attainments of the GENERAL Practitioner; such is the style of writing of a man who is a Member of the Surgical Senate, and who, in the College refutation states, "that not any persons, except the Court of Examiners (that is, the Council) are able to judge of the qualifications of surgical students;" and who in the same refutation modestly asserts, "that the increased respectability of the profession may be mainly ascribed to the more *extended education* which has been progressively required of the Candidates for the diploma." If our author is a fair sample of the "extended education" amongst the Members of the Council, then, indeed, as we have all along thought them, they are precious judges of scholastic and professional acquirements. Now we ask the most prejudiced in favour of the existing order of things, we ask the "Hole and Corner" tribe, if the CONSTITUTION of that College must not be radically most injuriously and unjustly defective, which could select for preferment such a gentleman as Mr. GUTHRIE, to the exclusion of a LAWRENCE?—"all the world to nothing!"

The mother of Dr. HEWETT's baby, in gratitude to her *deliverer*, intends to name her child after him, with the addition of St. George—thus, "Hewett St. George Owen;" the peculiar circumstances of the child's nativity merit this distinction.

It is reported in a female circle at the West end of the town, that Dr. HEWETT intends, very shortly, to commence a series of experiments on the important and interesting subject of Impregnation, which together with Mr. CHARLES BELL's observations on the functions of the urethra

and prostate, and some extracts from Mr. Joseph Henry Green's private case-book, would prove the basis of a valuable volume, and exhibit some curious specimens of "antecedent" without "consequent unities."

Joe Burns recommends Dr. Hewett to have his "Cap" cut from a child's caul.

In justice to Mr. Jeffreys we have to state that a dresser first attempted to pass the catheter in the case of Catherine Owen; but was baffled in the attempt from the situation of the child's head; a catheter passed into the meatus auditorius would most certainly have to travel some distance, and a curious route too, before it could reach the meatus urinarius.

We are informed that a poor man was turned out of St. Thomas's Hospital, by Mr. Nash, the Steward, a week or two since, in consequence of his being shabbily dressed and dirty; we hope this is not true, and shall be happy, if enabled on authority, to contradict the report—if true, we beg to inquire if the Wards of St. Thomas's Hospital are to be converted into Assembly-Rooms, and if the Steward is to receive the appointment of Master of the Ceremonies, as well as that of "Prompter?" This Hospital, we presume, was not endowed for the wealthy and well-attired, those whose means enable them to procure baths, and purchase savory odours—but for the impoverished, ragged, and often necessarily dirty pauper. The more destitute the object, the more imperious are his claims on whatever assistance the Institution is capable of bestowing. The officers of public hospitals should bear in mind that those establishments were not erected for *them*, but for the poor, and that they are merely the *servants of the poor*: the Governors of the Hospitals at the same time, who are nominally their masters, being only *trustees for the poor*.

From among the deliciæ with which *pure* surgery abounds, we select the following prescription:—to the General Practitioner, poor ignorant creature, who, from his extreme ignorance is "unfit to enter the front door of the College," and who has been called by the writer of this prescription "a disaffected person," it will prove, we expect, a very great treat.

Take of Chalk Mixture, 6 oz;
Sulphate of Magnesia!!! 2 drachms,
MIX.

Now this is from the hand of our friend Benjamin Travers, F. R. S., President of the Hunterian Society, Surgeon to St. Thomas's Hospital, Petitioner to the College, *Pure* Surgeon, and Speechifier against Surgical Reform!

A fourth part of the above mixture was directed to be taken three times a day, and was prescribed in a case of diarrhœa. A post-mortem examination exhibited an ulcerated condition of the intestines. O Benjamin! Benjamin! thy "tools are blunt" indeed.

We are still receiving a multitude of communications on the mismanagement of the Veterinary College; we have two or three however of an opposite nature; in these the Professor is spoken of in the highest terms of approval, and in justice to him we feel it to be our duty to give one of them a place in this Journal. It is our wish that each party should have a fair hearing; and that the facts on each side should be placed before the world in order that the public may arrive at a just conclusion.

This Institution, as we have already stated, has experienced extraordinary patronage, and it cannot be denied that

its means of promoting anatomical and physiological science have been most ample. Now we ask *what has it done* for science? Mr. Coleman's panegyrist asserts that he is one of the first physiologists in Europe; but he omits to state what Mr. Coleman has done to entitle him to this honourable distinction.

VETERINARY COLLEGE.

To the Editor of THE LANCET.

SIR,—Your attention has been directed to abuses existing in the government of the Veterinary College, and especially to the mode in which the examinations are conducted.

That government already trembles, and its members, like cattle affrighted at the distant rolling of the thunder storm, *have assembled together* to seek the means of evading the dreaded effects, to avoid, by enveloping their proceedings in the cloak of secrecy, the searching shaft of scrutiny, the flash of discovery, and the drenching shower of deserved obloquy. Happy indeed would they be, if your animadversions were confined to the department of examination only, for there are other points in the internal economy of the College, which, when properly illustrated, and given to the world through the medium of your pages, will show to what depth corruption and abuse take root, when suffered to go on unnoticed and unchecked.

The objection to the members composing the present junta of Examiners is just, but cannot be remedied as your correspondent the "Veterinary Surgeon" wishes, since the incompetency of the Metropolitan Veterinary Surgeons, as Cherry, Beeson, Goodwin, &c. is universally acknowledged! though, without doubt, as the matter is at present managed, the principal duty, viz. the discussing of the substantial dinner at the Freemason's Tavern, would be performed quite as ably by these gentlemen as any of the present board, Dr. Pearson not excepted.

Coleman's conduct deserves more than a casual notice; his monopoly of nearly all that is profitable at the College, and his indiscriminate admittance of the most illiterate and worthless, provided they come with fee in hand, merit the severest reprobation; but even these will be deemed trifling in comparison with certain abuses existing in the management of that truly Augean stable, the Infirmary of the College; abuses at present under strict investigation, and which, though hastily endeavoured to be amended since the last prick of THE LANCET, shall be displayed in all their deformity, when traced accurately to their source That they may be displayed, the veterinary world look for that aid which you have so liberally and successfully afforded the members of the medical profession, confident that however great corruption may become through long negligence, it can scarcely continue, when regularly subjected to periodical rebuke.

I am, Sir,
Your obedient servant,
JAMES BEARD.

St. Pancras, July 11.

To the Editor of THE LANCET.

SIR,—I am glad to see the Veterinary College and its concerns have at length found a place in the columns of THE LANCET, and I agree in substance with your correspondent "A Veterinary Surgeon," as to the morbid state of that Institution. Now, one of the axioms of its Colossal Professor is, that there is no such thing as *comparative* anatomy; that "he is sick of the term;" and that because a certain quantity of a given substance will operate on the stomach or bowels, for instance, of one animal, it is absurd to infer that a proportionally larger or smaller quantity must operate similarly on another animal. Agreeing, as all rational men with the least experience in animal medicine must do, in the truth of this axiom, I cannot but feel most strongly the absurdity of employing, *exclusively*, persons in one branch of a profession to examine into the fitness of those about to exercise another and essentially very different branch of that profession. To argue this point would be an affront to common sense; and in point of fact, these medical examiners of the veterinary students resort to the "College" for treatment of their own horses, and to the veterinary practitioners for information on all practical points.

One of these two cases must be the fact, viz. that there are individuals practising the veterinary art, competent to act as members of an examining committee; or that there are not individuals competent so to act. In the first case, reason and justice, both to the profession and to the public, require seats for a

portion of such individuals at the examining board; and in the second case, the morbid state of the constitution of this College, and the unfitness of its professor for a TEACHER of veterinary medicine and surgery, or at any rate his ill success after thirty years labour, must be evident: and the sooner the one is renovated, and the other removed, the better for the profession and the public.

Your Correspondent, a "Veterinary Surgeon," when animadverting on the admission of men who can neither read nor write, could hardly, I should think, have calculated on so happy an illustration of his position, at least as far as reading and writing to an useful purpose go, as that which has been given on the same page of "THE LANCET," by Mr. R. Vines, who makes the *valves* in a set of vessels, about which he seems to entertain most confused ideas, RAISE *the column of fluid* circulating in them, and jumbles together names and terms used in an art, of which he forsooth is a "*Demonstrator!*" in a way that must puzzle any mind attempting to follow him, as completely as he has puzzled himself in giving birth to this undescribed something, or for ought that appears to the contrary, a mere phantasy of a disordered imagination. Let any one carefully read the two experiments, as this "Demonstrator" calls them, and he will pity the young men and the old men who are to be led through the intricacies of anatomical knowledge by such a guide. But let me ask a question or two, and when these are answered, I have others in *petto* Was Mr. R. Vines selected for the purpose of being "*accelerative*" of science? or, was Mr. R. Vines selected as the person who, under the name of "Demonstrator," would consent to take the lowest rate of pay from Professor Coleman for having his name placed as filling that office? I am, Mr. Editor,

Yours respectfully,

PETER PESTLE.

Charlton, near Wolwich,
July 11, 1826.

To the Editor of THE LANCET.

SIR,—Having read a letter in the last Number of your valuable Publication, relating to the Veterinary College, I am induced to reply to it on two points: first, as it regards the persons who are appointed Examiners; and secondly, relating to the very improper persons who are allowed certificates from the Board of Examiners. On the first point, I am confident that the College is very much indebted to those gentlemen who have so kindly (and I may say condescendingly) lent their assistance in this case; as far as I can judge, they are the most proper men that can be chosen to fill the office, inasmuch as they are men of the first medical talent. I will ask your correspondent this question: can there be chosen the same number of men belonging to the Veterinary Profession who are so capable of judging of the qualifications of a pupil as our present Examiners are? If there could be men chosen out of the Veterinary Profession equal in abilities to Mr. Coleman, then I should say by all means have veterinary surgeons on the examing committee; but unfortunately for us, there is not one veterinary surgeon in this kingdom, who is equal in talent to our worthy professor. In fact, the Veterinary College has to boast of having at the head of it one of the first men this country ever produced, as far as medical knowledge is concerned; as a physiologist, he stands unrivalled; under these impressions, I shall say, continue (as long as they will do us the honour of holding the office,) the same enlightened men as are now elected, and do not let us for a moment suppose that it is for the sake of partaking of a good dinner at the Freemasons' Tavern, and to pocket the pupil's money that they hold the office; but on the contrary, let us come to this conclusion, that they are actuated solely with a view to the advancement of the welfare (which they certainly are) of the veterinary profession at large. Now as to the subject of the second part of my letter, I will admit that many improper persons are admitted as veterinary surgeons; but are there not many improper persons admitted into the medical profession? Certainly these are such exceptions as will unavoidably take place sometimes; but your correspondent asserts, that there are many veterinary surgeons that have obtained certificates from the Examining Board, and so utterly ignorant that they are unable to read or write; in reply to this unfounded assertion I shall make use of an old saying that a friend of mine occasionally quotes, which is this:

"Lest men suspect the tale 's untrue,
Keep probability in view."

By allowing this letter a place in your next Number, you will much oblige

Sir, your obedient servant,

A VETERINARY SURGEON.

London, July 11, 1826.

HOSPITAL REPORTS.

HOSPITAL OF SURGERY,

Panton Square, St. James's.

In our Journal of June 10th, we reported two cases of injury of the head, which occurred at this Hospital, wherein decided benefit was derived from prompt depletion, purgatives, low diet, and quietness; with great caution in the use of local applications. The following two cases illustrate the effects of an opposite plan of treatment, and the mischief from delay in the use of active remedies.

FATAL INJURY TO THE HEAD.

George W. æt. 3. There is a wound of an inch and a half long, extending across the middle of the frontal region of the left side, the edges of which are much swelled, puffy, and widely separated from each other; the subjacent bone is denuded and white; the wound discharges a thick and fœtid pus; both eyelids are considerably œdematous; the child is feverish and restless, and continually calling for something to drink; Skin very hot; pulse 150; bowels irregular; urine very high coloured and scanty; tongue white and chopped.

The mother states, that a fortnight ago, while playing on the stairs, the child fell down four or five steps and struck its head against the edge of the stone. The wound bled very freely for two hours, when it was taken to an hospital, and the house surgeon brought the edges of the wound closely together by adhesive straps. This dressing was allowed to remain for three days, during which time the child was very irritable, and complained much of its head. On the third day the straps were removed and a poultice applied. The child from this time became much easier, and a copious discharge of matter took place. The poultice was continued, some internal medicines ordered, and the child remained apparently recovering and in good spirits, until three days ago, when the edges of the wound were again drawn together by straps, and a bandage applied tightly round the head. These produced great irritation, but were not removed till the afternoon of the following day, when the mother was much struck with the change in the appearance of the wound, which, from not having been at all swelled, had now assumed its present appearance. On coming into this Hospital, Mr. Wardrop ordered the head to be shaved, and six leeches to be applied immediately.

Eight o'clock, p. m. The leech wounds have bled copiously, and are still bleeding; the child is quiet and inclined to sleep. Pulse 150; skin cooler.

℞ *Subm. hydrarg:*
Pulv. antim. aa. gr. i. M.
to be given every two hours.

2d day. The leech wounds continued to bleed during the greater part of the night, and since the bleeding stopped the child has become more restless. Powders have not operated on the bowels; pulse 140; skin of the head very hot.

The leeches to be repeated; and ʒi of castor oil, with a ½ grain of calomel, to be given every three hours.

In the evening the bowels were opened, and what came away was of the most offensive nature. Skin very hot, and pulse about 150; mouth dry, and tongue furred. Let three leeches be applied, and continue to give the castor oil and calomel.

2d day. Passed a very good night, and is composed this morning. Leeches bled well; skin cooler, and pulse about 140. Had an enema last night, which brought away a quantity of stuff of a more natural appearance.

4th day. Had several copious stools yesterday, and is this morning much better. The erysipelas of the eyelids have almost entirely subsided, and the edges of the wound are much less swollen and puffy. Skin of the head hot; pulse 140, and firm. Three leeches to be again applied to the head, and ʒss of the ol. ricini to be given at bed time. A poultice to be applied over the wound.

5th day. To-day the countenance is much improved, and the child is amused with any plaything; the wound looks well, and the discharge is less fœtid. Skin cool; pulse as low as 110, and soft; bowels not open.

℞ *Infus. sennæ*, ʒss.
to be given immediately, and cold water to be applied to the head.

6th day. Yesterday the friends, having had access to the child, remained speaking to it for a considerable time, and allowed it to eat a piece of cake, since which the fever and restlessness returned, and it passed a sleepless night.

Its head this morning is very hot, and the pulse 140, vibrating; bowels not open during the night. Six leeches to be applied to the temples, and the calomel and castor oil given every two hours till the bowels are freely opened.

7th day. Slept pretty well last night, and the bowels have been freely opened this morning. Pulse increased in frequency, but firm. Repeat the leeches, No. iv., and give the calomel every third hour.

8th day. Last evening a bladder of ice was applied to the head, and allowed to remain for six hours, during which time the child was quiet and its breathing less hurried; this morning, however, it is again restless, with burning skin, and accelerated, but easily compressible pulse; bowels not opened by the powders. To take ʒij. of the ol. ricini, and the ice to the head to be repeated.

9th day. Since last report the child has been gradually sinking, and he died ten o'clock this morning.

Dissection (three hours after death).

Beneath the occipito frontalis muscle surrounding the wound, there was a considerable quantity of a greenish coloured pus, also three or four small abscesses of the size of a shilling, each between the pericranium and bone. In the course of the coronal suture to the extent of several inches, the pericranium was puffed up, under which pus was also collected; the integuments and muscles were of a pale colour. The internal plate of bone, corresponding externally to the denuded portion of the cranium, was of a dark brown colour, and had no attachment to the dura mater. The dura mater immediately under, to the extent of two or three inches, was of a dark sloughy appearance, with matter effused on its surface; the whole anterior portion of this membrane was considerably thickened, and at several points small quantities of matter effused between its laminæ. The substance of the brain beneath this dark portion of dura mater, was converted into a slough the size of a crown piece, and about a quarter of an inch in thickness; it was of a light green colour, gave way on the slightest pressure, and emitted a most offensive odour. The surrounding portion of brain was more vascular than natural, and a number of red vessels could be traced running towards the diseased mass. The rest of the brain was exceedingly firm, and of a paler colour than usual. The lateral ventricles contained about two ounces of serum.

INJURY TO THE HEAD.

Henry J., æt. 5. A fortnight ago, while playing on a tombstone, he fell down and struck his head above the right eye-brow; he was taken up quite sensible, but the part, although apparently only slightly bruised, immediately swelled to the size of a pigeon's egg. About half an hour after he became stupid, and complained much of pain in his head; he remained in this state for an hour, when he went to sleep, and awoke seemingly well. Did not complain again for three days, and the swelling on the forehead had completely subsided; his head now became painful, and has continued more or less so since. Complains also of pain in his belly; appetite gone; much thirst; pulse very quick and small; has an anxious look, and is of a sallow complexion. When he was brought to the Hospital, he had a convulsive fit, which lasted about ten minutes.

Six leeches were immediately applied to the forehead, and

Subm. hydrarg.
Pulv. antimon. aa. 1 gr. M.

to be given at bed time.

2d day. Is much the same as yesterday. Skin very hot; pulse 120; bowels not opened. Was bled at the arm this morning to ʒx., and ordered to take the calomel and antimony every two hours.

4th day. Is much better, and has been free from pain since the bleeding; has taken six of the calomel powders, which have acted freely on his bowels. Pulse quick; tongue white; skin hot.

℞ *Infus. sennæ*, ʒij.

to be given four times a day, and four leeches to be applied behind the ears.

6th day. Since the last report the child's bowels have been kept very open, and he is now free from all bad symptoms. To continue the powders and senna mixture occasionally, and enjoined great quietness.

ANOMALOUS DISEASE OF THE TOE.

A. Z. a tailor, 35 years of age, appeared at the Hospital some months ago, with an affection of the skin of one of the toes of his left foot, to the extent of a shilling piece; the integument was then considerably thickened, and there were on this part a considerable number of small points of ulceration. About two years before, from wearing tight shoes, the skin had been abraded, and the small ulcerations had subsequently appeared. Various caustics, ointments, &c. had been successively employed, but without benefit; two attempts had also been made to excise the diseased portion of skin, but the disease returned after both operations. A third operation was performed at this Hospital, which consisted in removing what was considered as *beyond*

the diseased skin; and the wound cicatrized quickly, and he left the Hospital apparently cured.

About three weeks ago, he however returned, with the toe much in the same state as before the last operation. Adhesive plaster and arsenic were now tried in vain, and the poor man despairing of the disease being cured, and suffering from it great inconvenience, particularly in walking, he was anxious to have the toe removed.

Operation.—The toe was amputated by Mr. Duncan at its articulation with the metatarsal bone, by making a full sized flap from the integuments of the sole surface of the foot, in order to avoid having a cicatrix to come in contact with the ground in walking. One of the digital arteries bled profusely, but the hæmorrhage was easily arrested by a compress and bandage. Two grains of opium were given immediately after the operation. In the evening he complained of pain in the wound, and on examination slight swelling and inflammation were found extending from the wound along the dorsum of the foot, which induced Mr. Duncan immediately to cut through the bandage in several places, (we wish to God there were such *house surgeons* in some other hospitals) which was followed by immediate and permanent relief, and the wound healed by adhesion, an excellent stump being formed.

DISEASE OF THE WRIST.

Daniel S., æt. ——, a sailor. This was an example of caries of the joint of the wrist, the affection being confined to the extremity of the radius and scaphoid bone, which is articulated with it. The disease had commenced without any apparent cause, six months previous to his admission, and he had used no remedies. From the incurable nature of the disease, the constitutional irritation, and pain accompanying it, amputation was deemed the only resource, and the patient himself was anxious for the operation. The limb was removed by Mr. Wardrop, by the flap operation, and there has been no point of particular moment in the history of the case, except the great benefit which appeared to be derived from full doses of opium, given both previous and subsequent to the operation, a practice adopted by Mr. W. as a general one in all cases of operation. The bowels having been for some days carefully evacuated, he took two grains of solid opium on the night previous to the operation, slept unusually well, and felt very tranquil. Two additional grains were given immediately after the operation, and one more at bedtime. The effects of the opium were, that the severe pain after the operation soon ceased, that he remained tranquil all day, and that he passed an excellent night, neither was his pulse in the slightest degree altered from its natural state. He continued the opium for two nights, his bowels were easily regulated by senna mixture, and the comp. colocynth pill. The wound healed by adhesion, and he never had a febrile symptom.

On examining the wrist, the styloid process of the radius was found carious, and a considerable portion of the articulatory surface of that bone ulcerated. The corresponding surface of the scaphoid bone was also diseased. Around the extremity of the radius there was a considerable quantity of osseous matter deposited, giving it a notched irregular appearance.

GUY'S HOSPITAL.

The following cases were admitted into the Hospital under the care of Mr. Morgan, on Wednesday, June 14th.

Males—Four cases of ulcer on the leg; ulcer on the foot (connected with diseased bone); hæmorrhoids; chronic enlargement of the testicle; periosteal swellings; inflammation of the wrist joint; lumbar abscess; chronic disease of the knee joint (2).

Females— Ulceration of the palate; chronic inflammation of the wrist joint; scaly eruptions; ulcer on back from a burn.

The cases of ulcer do not offer any thing worthy of notice. The patient with *hæmorrhoids* was much relieved by the exhibition of the following medicine three times a-day, and left the Hospital about a week after admission.

Castor oil, 1 *drachm*;
Laudanum, 15 *drops*. M.

CHRONIC ENLARGEMENT OF THE TESTICLE.

The disease in this case is of six weeks standing; the testicle is enlarged to more than twice is natural size, and is very hard to the touch. The patient states that he has not had gonorrhœa recently, nor has he received any injury at the part affected. The following plan of treatment has been pursued with success in this case:—half a drachm of mercurial ointment rubbed in every night, with the daily exhibition of purgatives, and the patient kept to his bed.

PERIOSTEAL SWELLINGS.

The particulars of this case are as follow:—C. J. ætat. 45, a pale half starved looking wretch, has been ill one year. He states that he had a small sore on the penis twelve months ago, for which he took mercury three weeks, and ptyalism was induced and kept up during the greater part of the time. The sore spread during the use of the mercury, and he went into Bartholomew's Hospital, where he remained six weeks. He is not able to say whether he took mercury in any form whilst in that institution; it does not appear, however, that the mouth was affected. And from his description of symptoms, we suppose he must have had an attack of fever during his sojourn in the Hospital. He was recommended to go into the country, and he did so, the sore at this time not having quite healed. It got well eventually, and he was in some measure regaining his strength, when, after exposure to wet and cold, he was attacked with pains in the limbs. He now had recourse to medical advice, and mercury was again exhibited; under this treatment he grew worse, and nodes appeared on the shins and arms. Under the impression that the disease was only to be rooted out by mercury, the use of this medicine was persisted in.

When admitted, we found a painful swelling on the outer part of the right ulna, about half way down, a similar swelling just below the olecranon, one on each shin, and, lastly, on the os frontis. These swellings were very painful and tender, and the pains in the limbs are most distressing at night. He had superficial ulceration of the cheek on each side of the nose (that species of sore which is so frequently seen in cachectic habits), and was covered with a scab. The patient informed us, that he had no eruption on the skin during his indisposition, nor had his throat been sore. The periosteum, or bone, in this case, therefore, appears to have been affected before the "first order of parts," as they are termed by Hunter (meaning the skin and throat). Whether the nodes were produced solely by the *unmerciful* exhibition of mercury; whether they are the result of the combined action of mercury and syphilis; or, whether they are to be considered as the products of venereal disease alone, is a question we cannot resolve.

Under the following plan of treatment, the patient has experienced much benefit: Blisters to the swellings; ten grains of Dover's powder given night and morning, and 20 minims of nitric acid three times a-day, with a generous diet.

INFLAMMATION OF THE WRIST JOINT.

W. Neas, a young man of unhealthy appearance, admitted on account of disease in the right wrist. He states, that about a month ago he fell upon his hand, and thus violently sprained the parts about the wrist; it swelled and became very painful, and he applied for relief at the Middlesex Hospital as an out-patient; this was two days after the accident. Some cold lotion was given him to apply to the injured parts, and he continued his occasional attendance for about a fortnight. During this period the parts about the joints became much inflamed, swollen, and exceedingly painful. He had also a great degree of febrile excitement; he was thirsty, and the throbbing pain precluded him from obtaining rest; in fact, the symptoms which he describes are those characteristic of acute inflammation of the joint, and of course require active treatment. The junior House Surgeon, Goss, (one of Shaw's satellites), prescribed *eight leeches, and a purging powder!*

The poor man obtaining little or no relief from such imbecile treatment, went to a Dispensary in Welbeck-street, but with no better success, at length he made application at this Hospital and was immediately admitted. (The case was not deemed of sufficient importance to be admitted into the Middlesex Hospital.) The present symptoms are—swelling of the parts on the back of the wrist-joint, as if effusion had taken place in the thecæ of the tendons at this part. The integuments are inflamed; there is excessive pain on motion, and tenderness on pressure; the pulse quick and sharp; the tongue furred; also restlessness and thirst.

Mr. Morgan observed on this case, that although from the patient's description of his former state the symptoms had in some degree subsided, still there was so much inflammation going on that it would require active local depletion. He feared, however, that already much mischief was done, and he should consider it a favourable termination of the case if it ended in partial anchylosis.

Twelve leeches to be applied every second day, and the bleeding to be freely encouraged; the hand to be placed on a splint.

Tincture of henbane, thirty drops.

Camphor mixture, one ounce and a half;

to be taken three times a day.

Dover's powder, ten grains;

to be taken at bed time. The bowels to be kept open by the occasional exhibition of the house physic.

From the period of his admission up to the present date (July 3d), the plan of treatment laid down above has been persisted in. During the first week the leeches were applied every day, and of late a cold lotion has been constantly used. The swelling of the parts has greatly abated, and there is much less pain on motion. The constitutional symptoms too have subsided; the appetite is improved, and he sleeps well.

LUMBAR ABSCESS.

The patient afflicted with this formidable disease is a sickly looking boy, five years of age; a swelling made its appearance in the loins about eight months since; it was punctured, and no attempt made to close the opening; it has been constantly discharging pus from the time the opening was made. The mother states, that previous to opening the abscess, the child's health was but little impaired; since that time, however, its health has rapidly declined.

Mr. Morgan supposes there is disease of the lumbar vertebræ, consequently nothing can be done for such a case, and it must (in our present defective state of knowledge) be left to pursue its own course.

The case of *ulceration of the palate*, occurs in a delicately looking young woman; there is an ulcer on the roof of the mouth of an unhealthy character, with a small opening in the bony palate. She states that the disease has existed three months; she is married, and has been living in the capacity of a wet nurse. She is evidently much out of health, pale and debilitated; she denies ever having had any form of venereal disease.

Mr. Morgan directed her to take a wine glassful of Griffith's mixture three times a day, and a solution of the nitrate of silver (one scruple to an ounce of water) to be applied to the part. Under this plan of treatment she was improving, when she was attacked with erysipelas, from which she is only just recovering.*

The patient affected with *chronic inflammation of the wrist joint*, is a young woman of strumous habit. The disease was brought on by injury, and is characterised by external swelling and pain on motion. By the frequent application of leeches and cold poultices (made with Goulard lotion), the symptoms have entirely subsided.

The two remaining female cases do not require any further notice.

OPERATION OF LITHOTOMY.

Mr. Bransby Cooper performed this operation on Tuesday (June 27). The patient, a boy about fourteen years of age. Mr. Cooper used on this occasion Mr. Key's knife with the straight staff. The incisions were very well made and with due facility, and the calculus was readily extracted; but there was great awkwardness shown in the attempt to introduce the staight staff. This part of the operation alone occupied more than a quarter of an hour, the patient at the same time calling out vehemently, at the pain occasioned by the attempts to pass the instrument.

The calculus was of the mulberry kind, of the size of a horse chesnut, and rough externally.

We observed several foreigners present, and we found on conversation with them afterwards, that they had not seen the operation performed with the straight staff, until the present occasion. In consequence of the difficulty experienced in its introduction, they evidently carried away a prejudice against its use.

* It is a notorious fact, that the ward in which this woman is placed (Charity) has not been free from erysipelas for nearly twelve months. We cannot pretend to say in what the *fomes morbi* exists, but it would perhaps be right to let the ward be empty for a short time, and thoroughly ventilate it.

ST. THOMAS'S HOSPITAL.

CASE OF POPLITEAL ANEURISM.

W. L., ætat. 34, a man of spare habit and somewhat lax fibre, but not unhealthy in appearance, was admitted on the 22d of June into the Hospital, under the care of Mr. Travers, on account of a tumour in the right ham.

He stated on his admission, that he first discovered the swelling about a month ago, it was then small, but went on gradually increasing.

For the space of two months previous to the appearance of the tumour, he had felt painful and uneasy sensations about the knee joint, which he attributed to rheumatism. The pain was not constant, and it was of a dull aching kind.

He consulted a *surgeon* at Clapham, on the nature of the tumour in the ham soon after its appearance, and it had

then, according to the patient's statement a pulsatory motion, or to use his own expression, "a beating" could be distinguished. This *surgeon*, however, told him that his complaint was "a touch of the rheumatism and gout," *he ordered a blister to be applied to the tumour, and the leg to be immersed in warm water*, at the same time exhibiting some purgative powders!

From the time these measures were complied with, the leg became exceedingly painful, and the patient was rendered incapable of using the limb.

Present symptoms.—There is a firm pulsatory tumour of about the size of a hen's egg, situated in the popliteal space; pressure on the femoral artery at the middle of the thigh completely stops the pulsation and reduces the swelling to about one-third of its size. When the pressure is removed, the tumour speedily resumes its original size and pulsatory motion.

The leg is not swollen nor œdematous, but the patient suffers great pain, which is referred more especially to the calf of the leg, and to the inner malleolus, extending across the instep. The pain is of a "gnawing" kind, and is much increased on motion; the limb is kept in the flexed position.

As it has been supposed particular occupations have an influence in producing this disease of the popliteal artery, it may be right to mention the nature of the patient's present and former employment. He was for several years at sea, but returned to England about the time of the bombardment of Algiers, and then pursued the trade of a calico printer, to which he was originally bred. In this employment he was accustomed to carry very heavy weights. Being unable to procure work at this business, he became an itinerant chair-bottomer, and consequently walked about a great deal: for the last twelve months he has been a watchman.

Mr. Travers having explained to the man the nature of his disease, and the necessity of an operation for its cure, he readily assented. Soon after he came to the Hospital, the pain in the limb increased so much, as to deprive him of rest and render him anxious to have the operation performed.* He applied, of his own accord, cloths made wet with cold water to the leg, which had the effect of somewhat lessening the severity of the pain. It was eventually determined to perform the operation on Friday, June 30.

Operation.—The patient was placed on the operating table, with the right leg semiflexed, laid on its outer side, and supported by a pillow. The operator was seated in a chair on the right of the patient, and after carefully tracing the course of the artery down the inside of the thigh, he commenced the operation by making an incision through the integuments. The extent of the incision was upwards of two inches, and it was made at about one-third way down the thigh. The integuments and fascia lata being divided by this incision, the sartorius muscle was exposed. Mr. Travers, with his finger, drew this muscle to the outer side of the wound, and by a careful process of dissection, at length arrived at the femoral sheath, into which an opening was made, and the artery separated from its surrounding connexions. There was a considerable time spent in attempting to pass the aneurismal needle under the artery; we could not ascertain from what cause the difficulty arose. A single ligature was eventually passed round, drawn tight, tied, and one of the threads cut off. The edges of the wound were brought together by means of adhesive plaster; the patient was put to bed and the limb wrapped in flannel.

Nothing remarkable has occurred since the operation, the patient in every respect has gone on favourably. The pain in the limb was immediately relieved by the operation.

In addition to the foregoing operation by Mr. Travers, Mr. Green performed on the same day an operation for hare-lip, and for entropion. The latter operation consisted merely in excising a portion of integuments beneath the lower lid.

* Mr. Travers, in offering some remarks on this case, observed, that the cause of the acute pain sometimes experienced in popliteal aneurism, was by no means satisfactorily accounted for. He had seen it prevail in some cases to the most distressing degree, whilst others, as is well known, were totally free from pain.

PAINFUL AFFECTION OF THE NERVES OF THE LEG FOLLOWING A WOUND.

C. N. ætat. 53, a carpenter, was admitted into the hospital under the care of Mr. Tyrrell, on Thursday, June 15, on account of neuralgia of the right leg. It appears that about fourteen months ago, by means of an axe, he inflicted a severe wound on the fore part of the right leg. The scar is now apparent, it is of about two inches in length, situated over the lower and expanded portion of the tibia, and taking an oblique course from within, outwards. It reaches over the tendons of the extensor muscles.

The wound bled very much, recourse was had to medical assistance, and it was found necessary to apply a ligature to a bleeding artery. The wound healed in the course of three weeks, but about a fortnight after, he began to experience a burning heat in the joints of the great toe, and he shortly after had so much pain, with increased sensibility, that he could not put his foot to the ground. He had also twitchings or irregular muscular movements in the leg and foot. These symptoms continued unrelieved until the month of February last, when he saw Mr. Tyrrell at Dover. That gentleman made an incision at the lower part of the leg, and excised five eights of an inch of the anterior tibial nerve. The only benefit which he experienced from this operation was, that he could afterwards move the foot without producing pain as formerly.

Present Symptoms.—These are of such a peculiar and irregular nature, that it is difficult to express accurately the morbid sensations which the patient describes himself as suffering. He first feels a tingling pain attended with heat at the joint of the great toe, at the same time there is a dragging uneasy sensation in the outermost toe. The heat and tingling pain extended from the great toe along the inner side of the foot to the depression of the os calcis, and then a tingling or creeping sensation extends up the leg to the body.

The paroxysms are uncertain in their occurrence, and generally of two or three hours duration. The integuments over the fore-part of the great toe are benumbed; on rubbing the scar of the wound, a prickling feel is produced. The patient has constant pain, with vertigo, and other uneasy sensations in the head. He has been deaf from infancy, but states that when the paroxysms are on, he can distinctly hear two voices singing, and he attempts to describe the sounds produced. So forcible is the hallucination, that it is with difficulty he can divest himself of the belief of the reality of persons singing.

Mr. Tyrrell directed the following plan of treatment: the tartar emetic ointment to be rubbed over the foot;

Blue Pill, 3 *grains*;
Extract of colocynth, 3 *grains*;
to be taken at bed time;

Subcarbonate of soda, 15 *grains*;
Infusion of gentian, 1½ *ounce*;
to be taken three times a-day.

The ointment having failed in producing much external irritation, a portion of blistering ointment, was added to it; this succeeded, and a copious crop of pustules was produced.

Three weeks after admission the symptoms continued much the same. The patient is in Isaac's Wards, and the case is well worthy of inspection.

OPERATION OF LITHOTOMY.

This operation was performed by Mr. J. H. Green on Friday, July 7th. The patient, a healthy looking young man, 18 years of age, had laboured under the usual symptoms of stone upwards of ten years. The calculus extracted was about the size of a walnut. The operation was very well performed, Mr. Green using the gorget.

The operation was performed at noon, and in the evening of the same day, the patient was attacked with great pain in the abdomen, with high excitement. Indeed the symptoms were so alarming, that Mr. Green was sent for; on his arrival, he found the symptoms so urgent, that he hesitated as to the propriety of venesection. Upon investigating the nature of the symptoms, however, more minutely, it was discovered that the urine could not find a free passage through the wound, and consequently had accumulated in the bladder. Mr. Green passed a female catheter through the wound, and drew off a considerable quantity of urine, which afforded almost instantaneous relief. A dose of laudanum was exhibited, and the patient had a comfortable night. On the following day it was found necessary again to introduce the catheter, but subsequent to this period the patient has done well.

ST. BARTHOLOMEW'S HOSPITAL.

CASE OF DISEASED CARPUS;—AMPUTATION OF THE JOINT.

James F., 57 years of age, was admitted into this Institution on Thursday, June 8th, labouring under extensive disease of the right carpus. He informed Mr. Lawrence, under whose care he was admitted, that twelve months since, whilst driving a gig along the street, a hackney-coach came in contact with it, and he was thrown with violence on the ground. Whilst in the act of falling he stretched out his right arm to protect himself, and the injury was by this means occasioned. As well as he could judge there did not appear to be any serious injury incurred,

and although very soon afterwards he suffered severe pain, yet he considered it merely as a sprain, and in consequence had recourse to stimulating liniments. From the first occurrence of the accident he has suffered severe pain, but has sought no surgical assistance until within the last three months, when he consulted a medical man, whose opinion was unfavourable. Within the last month four sinuses have broken out; two on the dorsal surface, and one on each side of the wrist; from these holes a thin ichorous matter has been continually oozing. The whole joint is considerably enlarged, but the remaining portion of the hand and also the contiguous portion of the fore-arm, are of their natural size. In addition to this local malady, the man's constitution has of late greatly suffered; from a strong and healthy individual he has become weak and enfeebled, latterly getting indifferent as to his fate, since he says "for him to live is but to suffer."

Taking the history and duration of the disease, with its present condition, into consideration, Mr. Lawrence considered there was no hope of benefitting the patient but by amputating the joint. He requested, however, that Mr. Earle and Mr. Vincent might see the man before he operated. They did so; Mr. Earle was of Mr. Lawrence's opinion, but Mr. Vincent thought the operation might be deferred. It may be proper to observe that on introducing a probe into the sinuses, no bone could be distinctly felt, except in one of them. As Mr. Earle coincided in opinion with Mr. Lawrence, the latter gentleman considered it unnecessary to defer the operation, and on Saturday, June 10, he performed it by making a semicircular incision on each side of the forearm, about three inches above the carpus; the flaps were dissected back, the interosseous ligament, &c. divided and the whole of the soft parts kept back by means of the retractor, when the radius and ulna were sawn through. The radial, ulnar and interosseous arteries were secured, and the flaps brought together by adhesive straps. Previous to the operation, care was taken that the bowels should be well open, and an opiate was given at bed time.

CASE OF FRACTURE OF THE FIFTH CERVICAL VERTEBRA.

Charles M———, a bricklayer, 43 years of age, was brought into Accident Ward, on the 28th of April, having just before fallen off a scaffold twelve feet high. He fell on his back, and struck with considerable force, the cervical and lumbar portions of the spine. At the time of his admission into the hospital, no characteristic symptoms of injury to the spine manifested themselves; he had the fullest control over all his limbs, and complained of no particular pain, except in the back of his neck and loins, and this not in any great degree. On examining the vertebræ, no fracture could be detected. He was ordered to bed, and had a dose of house medicine given him.

29. About twelve hours after his admission, he began to loose his power over the lower extremities, and also sensation to a certain extent. To day, we find him lying on his back, with the free use of his upper limbs, but total suspension of voluntary power over the lower. He moreover passes his stools involuntarily, and the bladder has become paralysed, so that it was necessary this morning to draw off his water by means of a catheter. He has had some sleep through the night, but the tongue is dry and rather brown; pulse 90 and rather full. *Let him take saline mixture, with half a drachm of solution of tartarized antimony every four hours.*

May 1. Tongue moister; bowels have not acted since yesterday; the water drawn off by the catheter is very dark and slightly turbid. The lower extremities quite insensible. Mr. Lawrence, under whose care the man was, again examined the spine, but no fracture could be detected. On making pressure on the hypogastric region, the urine is observed to dribble from the orifice of the urethra. *Ordered to have an enema administered immediately.*

May 3. Has passed a restless night; attributes it to the griping occasioned by his taking some aperient pills. Bowels have not acted since the 1st. There is no increased power of motion over the lower extremities, but he says that within the last two days he has felt a shooting sensation down his legs and thighs. Urine is still drawn off by the catheter. Pulse 85, and small. Tongue rather dry and brown.

4. Bowels relieved; but the stools were passed involuntarily. In other respects just the same.

8. Somewhat improved. He says the sense of feeling in the lower limbs is increased. His bowels being confined yesterday, he was ordered to take a dose of calomel and jalap, and two hours afterwards, two ounces of house-medicine, which have had the desired effect.

11. He continues just in the same state. Bowels open; tongue continues rather dry; pulse 85, small.

17. Worse. Has had but little sleep for some nights past, and to-day he looks dejected and anxious. The urine drawn off to-day is exceedingly turbid, has purulent matter in it, and it has also a very strong ammonical odour. For the last few days he has had priapism. Pulse 80.

23. Within the last few days he has complained of great weakness and loss of appetite; the countenance has become sallow, and the features attenuated. The fæces still continue to be discharged involuntarily, and the urine to be drawn off. Pulse 80, very feeble; bowels kept open by aperients. Ordered to have six ounces of wine daily.

He continued in this condition with but a trifling, if any alteration in the character of the symptoms, until the 18th of last month, when his daughter came to see him, and for the purpose of kissing him, she put her arm round his neck; this is supposed to have displaced the fractured bone, for in a few seconds he became slightly convulsed and died.

Inspectio Cadaveris.

There was a general pale and flabby condition of the whole muscular structure of the body. The heart was particularly so, and formed an excellent specimen of what the French call "ramolissement du cœur;" with very little force the thumb was thrust through this organ. The blood was found in a fluid state, and as we have already observed to be the case under these circumstances, the internal membrane of the arteries was stained by it of a purplish hue.

The large intestines were loaded with scybalæ. None of the pelvic viscera were examined!

On examining the spine, the spinous process of the fifth cervical vertebra was found to be fractured, and the body of this vertebra separated from the one below. Blood was found effused on the theca throughout the whole extent of the canal below the injury, and on that part which corresponded to the fracture a hard clot was found. The theca was stained by the blood which was effused on it. The theca being slit up, that part of the chord situated opposite to the fracture was found quite in a pappy condition, and, although in a less degree, the portion of the chord inferior to the injury was also much softened. (It may be proper here to observe that the man had been dead two days.) That portion of the chord above the fifth cervical vertebra, was harder and more healthy. On making a section of the lower part of the chord an immense number of bloody points were observed in its substance. In No. 122, we have reported a similar case, in which the patient had a portion of the fractured bone driven into the medulla spinalis, by his wife attempting to raise him in bed; the man almost instantly expired.

CASE OF IMPERFORATE ANUS.

An infant, nine days old, was lately brought to this Hospital, having an imperforate anus. On examination there appeared to be a large accumulation within the rectum, as the space between the tuberosities of the *ischia* was tense and bulging. From this circumstance, Mr. Earle inferred that simply puncturing the integuments at the place where the anus is usually formed, would effect the desired end. A trocar was therefore thrust through the integuments and instantly a large discharge of flatus and bilious feculent matter followed. On introducing the finger the sphincter muscle was found perfect. For the first few days a canula was kept in the opening to prevent adhesion taking place, and subsequently a bougie has been passed twice a-day. The child has now left the Hospital cured.

It is proper to remark that the mother took her child to a *surgeon* in town, who told her *nothing could be done* for it, and that it must be left to its fate! Happily, however, she thought otherwise, and the life of her child has been saved. The child takes the breast with avidity, and the stools are of a most healthy character.

MIDDLESEX HOSPITAL.

SYPHILIS—CHANCRE—BUBOES; WITH SOME HOUSE-SURGICAL TREATMENT.

—— Morris, a stout muscular man, was admitted into Percy's Ward, in the early part of May, on account of a bubo in each groin.

The man was received as a patient of Mr. Joberns, but as our friend Joe was at this time indisposed* and incapable of

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* There have been various surmises as to the nature of our *illustrious* friend's indisposition. It was reported at one time that it was a *cerebral* affection; this, however, is not at all probable.

attending to his hospital duties, he fell under the *care* of Messrs. Bell and Shaw. Each of these worthies occasionally visited the patient; a mercurial plaster was ordered to be applied to the part, and afterwards poultices, with the occasional exhibition of purgative medicines.*

About a week after the man's admission, one of the buboes suppurated and burst, and in the course of another week, the bubo in the opposite groin likewise suppurated. From this period, which is about seven weeks since, the man has done nothing but apply poultices to the parts, and now the discharge from them is nearly as profuse as at first.

Mr. Joberns went through the Hospital for the purpose of *seeing* his patients; and as usual, inquired of the House Surgeon the particulars of the case. "Simple buboes," was the reply; ("simple" *booby*, thought we.) "Well, well," said Joe, "has he no chancre on the penis"? (Only think of Joe's sagacity!) "Oh! no Sir, (replied Hind,) he has had a severe gonorrhœa which is now almost gone."

Mr. Joberns, then turning to the man, desired him to draw back the foreskin, which exposed a small chancre, with thickened edges and base. We had ascertained the true nature of the case some time before, but wished to mark the sequel. We learned from him then, that he contracted the disease a few weeks previous to his applying at the Hospital; that at the time of admission, in addition to the buboes, he had phimosis in a slight degree, and from under the prepuce there issued a purulent discharge. (It was this, we suppose, on a superficial and careless examination, that induced Hind to conclude the man had gonorrhœa.) After he had been in the hospital a few days, he was enabled to draw back the prepuce. Since Mr. Joberns's *discovery*, black wash has been applied to the chancre, but no mercury has yet been given internally. The sore on the penis has not altered in character, and the sores in the groin continue in the same state.

Perhaps Messrs. Hind and Joberns are anxious to become experimentors, and accordingly have selected this as a suitable case for trying the efficacy of the non-mercurial treatment. Seriously, we would observe, that this case affords a tolerable specimen of the gross neglect and inattention usually shown to the patients of this Hospital by the surgical attendants. The House Surgeon must have examined the patient whose case we have related above, in a very negligent and superficial manner, or he would have detected a chancre. We know of no excuse that can be offered for him, and much less for Messrs. Bell and Shaw, who had the charge of Mr. Jobern's patients in his absence, and whose duty it became therefore to examine the cases. But this is only one of a thousand instances of like inattention to their duties, which we could enumerate as having occurred in this Hospital.

* It is worthy of remark that the surgeons of this Hospital seldom examine a case for themselves, when they are "going round," they merely inquire of the House Surgeon how the case is going on. As to pointing out to the pupils any circumstance connected with its history—it is quite out of the question.

ST. GEORGE'S HOSPITAL.

CASE OF FISTULA IN ANO.

Edward Hutchinson, a middle aged man, was admitted into this Hospital, May 17, under the care of Mr. Brodie, with fistula in ano; on the 17th of June, he underwent the operation of completely dividing the sphincter ani for the cure of the fistula. Mr. Brodie, in his clinical observations on fistula, observes that fistula in ano generally requires for its cure a surgical operation, although there are some cases that can be cured without an operation, and even cases where an operation would be absolutely improper; there is, for instance, a man up stairs with fistula, on whom I did not perform the operation, but why? oh! because he has an abscess in the lungs, and a worn-out debilitated constitution; and in those cases, where the constitution is very much impaired, all such surgical operations are injudicious and improper. The operation is likewise improper when the fistula burrows far up by the side of the rectum, for in cutting far up, you run a considerable danger of wounding large vessels, and the fistula can be cured without ever running such a risk. Fistula may form on the outside of the sphincter muscle, it may form in the substance of the sphincter muscle; it may form between the sphincter muscle and the membrane of the gut, but the most common seat of its formation is the substance of the muscle. In all these cases dissection, or a minute investigation, will show fistulas to be more or less connected with the sphincter muscle, and this will explain why an ab-

scess in the perineum, when the urine has its natural passage free, does not heal as readily as an abscess elsewhere. You would not expect an abscess among the muscles of the thigh or leg to heal as long as the patient was walking about, but confine him to his bed, and bandage the muscles above and below the abscess, so as to retain the muscles in the most perfect state of rest, and the abscess will soon heal. Just in the same manner the action of the sphincter muscle prevents the healing of an abscess in the perineum; therefore if you want to effect a cure, get rid of the action of the sphincter muscle. How can this be effected? for passing the evacuations from the bowels, coughing, and laughing, constantly disturbs these parts, by calling the sphincter muscle into action. Well, then, all this is to be overcome by completely dividing the sphincter muscle; after its division, it cannot act as a muscle, and the parts are left in a state of quietude. The cure of fistula by the common operation is often tedious and difficult, and considerable care and attention is requisite in dressing it after the operation; and often when it heals in one place it breaks out in another; by the division of the muscle, you soon effect a cure, with very little probability of its returning again. I was led first to perform this operation by a patient I had six years ago, who plagued me for six months, without effecting a cure, for as soon as one sinus healed, another broke open; at last a sinus broke far out, on the outside of the sphincter muscle, I then passed a lead ligature through the rectum, and over the sphincter muscle, (as recommended by Dessault,) I found there was something very hard I could not cut through, I then cut down upon it, and found it to be the sphincter muscle; I cut through the muscle, and the fistula soon healed. Since then, I have been in the habit of dividing the sphincter muscle entirely through, and with very evident advantage over the old operation. In performing this operation, I introduce a scalpel on my finger into the rectum, on a straight bistoury; having introduced the knife into the gut, I turn the sharp edge outwards, and cut slowly through the sphincter muscle, till it is completely divided; there is some hæmorrhage, but it is of no consequence, for it soon ceases. Previous to the operation, I give a purge to the patient, and a dose of laudanum afterwards; thus, by clearing the bowels with the purge, and giving the laudanum afterwards, you bind the patient's bowels. He has no evacuation for a couple of days, and the parts in the perineum enjoy perfect rest. I seldom dress the wound with any thing after the operation, for I find, unless there is any thing wrong going on in the constitution, that the parts heal much quicker without than with dressing. I made some experiments on this, and the result of my experience is, that without any dressings, the fistula will heal nearly in one half the time it takes if dressed; this is interesting, because some cases of fistula are very troublesome to the surgeon and to the patient when they require to be dressed every day. I performed the operation on two different individuals, both of good constitution, the one on a Monday, the other on the Tuesday following. I dressed one secundem artem for a month, the other was never dressed at all, and was perfectly well in a fortnight. Sometimes when the edges of the wound become callous and hard, the slight application of the nitrate of silver will hasten the cure. You would be led to believe that incontinence of the fæces would be the result of the division of the sphincter muscle, but I never knew but two instances of that; in one, an oozing continued for six months, the other not so long; but this arose in both from a too long and too attentive use of dressings. If the sinus extends far up by the side of the rectum, do not cut far up, for it is attended with considerable danger, and it is not necessary, for the division of the muscle does as much for the cure, as an operation can do. If there is a large abscess high up, I generally recommend my patient to the sea side. If the situation of fistula in ano at any time happens to be in the space between the anus and the os coccygis, I do not recommend to divide the muscle towards the os coccygis, because I have not found it to be attended with the same advantage as dividing it towards the tuberosity of the ischium, and I always divide it in this direction when the fistula is in the former situation. By dividing it in this situation, the extremities of the sphincter keep better asunder, and the parts enjoy more perfect rest.

ERRATUM.

At page 528, 1st column, 13 lines from the bottom, for "arranged," read *arrayed*.